U.S. ARMY CORPS OF ENGINEERS
CIVIL WORKS PROGRAM

CONGRESSIONAL SUBMISSION
FISCAL YEAR 2003

SOUTHWESTERN DIVISION

Budgetary information will not be released outside the Department of the Army until 4 February 2002

Justification of Estimate for Civil Functions Activities
Department of the Army, Corps of Engineers
Fiscal Year 2003

SOUTHWESTERN DIVISION

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SUMMARY, SOUTHWESTERN DIVISION

	FY 2002 Allocation	FY 2003 Request	Increase or Decrease
General Investigations			
Surveys	$ 8,076,000	$ 6,355,000	$ - 1,721,000
Preconstruction Engineering and Design	3,423,000	2,515,000	- 908,000
Subtotal General Investigations	(11,499,000)	(8,870,000)	(- 2,629,000)
Construction, General			
Construction	107,047,000	72,700,000	- 34,347,000
Major Rehabilitation	0	0	0
Dam Safety Assurance	9,578,000	18,600,000	+ 9,022,000
Subtotal Construction, General	(116,625,000)	(91,300,000)	(- 25,325,000)
Operation and Maintenance			
Project Operation	129,486,000	134,529,000	+ 5,043,000
Project Maintenance	124,862,000	132,413,000	+ 7,551,000
Subtotal Operation and Maintenance	(254,348,000)	(266,942,000)	(+ 12,594,000)
GRAND TOTAL, SOUTHWESTERN DIVISION	$ 382,472,000	$ 367,112,000	$ - 15,360,000

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

1. SURVEYS - NEW

a. Navigation Studies: None.

b. Flood Damage Prevention Studies: None.

c. Shoreline Protection Studies: None.

d. Special Studies: The amount of $150,000 is requested in Fiscal Year 2003 to complete one study.

Arkansas

White River Minimum Flows	866,000	487,000	229,000	150,000	0

The study area includes the White River, Norfork River, and the Little Red River in Arkansas, and Missouri. Since the 1930's, several projects involving water supply, flood control and hydropower have been undertaken in the White River basin in Arkansas and Missouri. The environmental affects of these projects that adversely impact all users along the rivers have never been mitigated. This study will develop a plan to provide for aquatic ecosystem restoration and minimum flows along the White, Norfork, and Little Red Rivers. Before the dams on the White, Norfork, and Little Red Rivers were built, these rivers provided warm-water fisheries. After the high dams were built, the tailwater below the dams would no longer support warm water fisheries. Coldwater trout fishery was introduced and sustained in the tailwaters. However, no specific storage was authorized to maintain any minimum flows for the trout fishery below the dams. During periods of non-hydroelectric generation, cold water releases are reduced drastically and the wetted perimeter of the tailwater is reduced. By specifically allocating storage in the lakes for the trout fishery, minimum flows can be sustained in the tail water during the times of non-hydropower generation.

The project is authorized by Section 374 of the Water Resources Development Act of 1999. This legislation authorizes minimum flows be provided by reallocating the following amounts of storage: Beaver Lake, 1.5 feet; Table Rock Lake, 2 feet; Bull Shoals Lake, 5 feet; Norfork Lake, 3.5 feet; and Greers Ferry Lake, 3 feet. These changes cannot be implemented until studies are completed that certify the pool raises are technically sound, environmentally acceptable, and economically justified. The Arkansas Game and Fish Commission understands the cost sharing requirements and have indicated they would cost share in the follow-on phases of the project. Local interests will be required to provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary in the construction of the project; contribute an additional amount in cash or credits to bring the total non-Federal share of costs allocated to environmental restoration to a minimum of 35

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Arkansas					
White River Minimum Flows (continued)					
percent.					
Fiscal Year 2002 funds are being used to continue the reconnaissance phase of the study. Fiscal Year 2003 funds will be used to complete the reconnaissance phase of the study in March 2003.					
SUBTOTAL NEW SPECIAL STUDIES	866,000	487,000	229,000	150,000	0
e. Comprehensive Studies: None.					
TOTAL SURVEYS - NEW	866,000	487,000	229,000	150,000	0

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

2. SURVEYS - CONTINUING

a. Navigation Studies: The amount of $2,145,000 is requested in Fiscal Year 2003 for continuation of five studies.

Arkansas

Arkansas River Navigation Study	5,830,000	2,435,000	756,000	910,000	1,729,000

The study area consists of the entire McClellan-Kerr Arkansas River Navigation System in Arkansas and Oklahoma. During the reconnaissance phase studies, representatives from the towing industry expressed concerns regarding the impacts of high flood flows on the system. Users (barge tow operators) have been experiencing delays in navigation due to low water conditions at the lower end of the system, and high flows resulting from flood conditions on the upper end of the system. The Corps of Engineers is currently constructing the Montgomery Point Lock and Dam in the White River Entrance Channel to alleviate the low water problem at the entrance of the system. The Users have requested the Corps of Engineers investigate problems associated with high flows on the system. When flows reach 60,000 cubic feet per second at Van Buren, Arkansas, barge tow operators are forced to restrict navigation during these high-flow periods. Floods have impacted navigation interests by restricting navigation from one to two months until velocity of the river slowed enough that barges could safely continue. The first phase of this feasibility study will be to investigate flow management to improve the overall economic benefits for navigation on the system by reducing the impacts of high flows from the upper reaches of the Arkansas River watershed. The high velocity period could be shortened by reallocating or adding additional storage in the existing reservoirs on the system; and by constructing additional lakes and levees for navigational flow management. The second phase of the study will investigate deepening of the navigation system over the entire length and providing passing lanes on the Verdigris River in Oklahoma.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study, at full Federal expense. Feasibility study activities will include developing numerical hydrologic and hydraulic models of the McClellan-Kerr Arkansas River Navigation System to establish base conditions for analyzing alternatives to minimize the affects of high flood flows, and to continue the studies to investigate deepening of the navigation system.

Fiscal Year 2003 funds will be used to continue the feasibility phase of the study. The completion date for the Phase I interim study is scheduled for October 2003. The completion date for the Phase II interim and the overall feasibility study is scheduled for March 2005.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas					
Corpus Christi Ship Channel	3,926,000	2,719,000	598,000	410,000	199,000

The Corpus Christi Ship Channel is a federally constructed deep-draft navigation project serving the ports at Harbor Island, Ingleside, and Corpus Christi in Nueces County. The existing project consists of approximately 35 miles of channels: a jettied entrance channel 45 to 47 feet deep and 600 to 700 feet wide from the Gulf of Mexico; the Corpus Christi Ship Channel with a depth of 45 feet and a width of 400 feet; and a branch channel referred to as the La Quinta Channel with a depth of 45 feet and a width of 300 feet. Tonnage transported on the Corpus Christi Ship Channel totaled approximately 78 million tons in 1994 and averaged 64 million tons over the past five years. The major commodity shipped on this waterway is crude oil. Local interests desire that the existing channel be widened to 500 feet, and deepened to 50 feet for use by larger vessels, resulting in more efficient movement of commodities, and therefore decreased shipping costs. The existing 45-foot project was designed to accommodate 59,000 dead weight ton (DWT) vessels with a loaded draft of 41 feet; however, large vessels of 100,000 DWT and greater regularly use the channel. These larger vessels could be loaded to greater depths, offering substantial reductions in vessel operating costs if additional channel depth and width were available. Channel widening would allow for more efficient vessel movements, resulting in reduced traffic delays and increased traffic safety. The feasibility study will also address the addition of barge lanes adjacent to either side of the deep-draft navigation channel. The reconnaissance study evaluated potential port commerce, transportation savings, construction costs, and dredged material disposal options and required complex economic considerations involving international grain and crude oil projections as well as the assessment of potential environmental impacts in a sensitive estuarine system. The reconnaissance study demonstrated that deepening the project to 50 feet is economically justified. Construction of this alternative would cost about $152 million and produce a benefit-cost ratio of 2.5. Benefits generated by this project are high priority, commercial navigation benefits which are in accord with current administration policy. The local sponsor for the study is the Port of Corpus Christi Authority. The Feasibility Cost Sharing Agreement was executed on June 2, 1999.

Fiscal Year 2002 funds are being used to complete the feasibility phase of the study. Fiscal Year 2003 funds will be used to prepare the first set of plans and specifications. The estimated cost of the feasibility phase is $6,640,000, which will be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$ 7,246,000
Reconnaissance Phase (Federal)	$ 606,000
Feasibility Phase (Federal)	$ 3,320,000
Feasibility Phase (non-Federal)	$ 3,320,000

The scheduled completion date of the feasibility phase of the study is July 2004.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Freeport Harbor	3,970,000	0	63,000	200,000	3,707,000

The Freeport Harbor project is located along the mid to upper Texas coast, and is formed by the improvement of the Brazos River, Texas, from the mouth about 6 miles upstream to Freeport, Texas. It provides for a 47 foot deep, 400 foot wide entrance channel; 45 foot deep, 400 foot wide main channel; 45 foot wide, 750 foot diameter turning basin; 36 foot deep, 200 foot wide Brazos River Harbor channel; and 36 foot deep, 200 foot wide Brazos River Harbor turning basin. The local sponsor, the Brazos River Harbor Navigation District, is interested in examining the feasibility of improvements to the existing deep draft navigation channel to determine the Federal interest in expanding the reach of the navigation channel to the Stauffer Channel and turning basin. The channel carries traffic that could be accommodated much more efficiently with a deeper (50-55 foot) channel. Many of the vessels that currently serve the chemical and oil industry in the area are light-loaded to enable them to operate in the existing channel resulting in delays at the Stauffer Channel and turning basin. The Brazos River Harbor Navigation District has expressed intent to share equally in the feasibility phase cost that may follow the reconnaissance study.

Fiscal Year 2002 funds will be used to initiate reconnaissance phase studies. Fiscal Year 2003 funds will be used to complete Reconnaissance Phase studies and to initiate Feasibility Phase studies. The preliminary estimated cost of the feasibility phase is $7,740,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost is as follows:

Total Estimated Study Cost	$ 7,840,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$ 3,870,000
Feasibility Phase (Non-Federal)	$ 3,870,000

The reconnaissance phase is scheduled for completion in March 2003. The completion date for the feasibility phase of the Study is September 2011.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Gulf Intracoastal Waterway - Modifications	9,050,000	169,000	252,000	225,000	8,404,000

The study area encompasses two locations on the Gulf Intracoastal Waterway (GIWW) along the Texas coast. One, the Brazos River Floodgates, is located approximately 7 miles southwest of Freeport, Texas, at the intersection of the Brazos River and the GIWW in Brazoria County. The other, the Colorado River Locks, is located approximately 45 miles southwest of Freeport, Texas, at the intersection of the Colorado River and the GIWW in Matagorda County. Both projects improve navigational safety by controlling traffic flow and currents at these dangerous intersections. Both also serve to control sand and silt deposition at the intersection of the GIWW with the respective rivers. As sediment control structures, they reduce maintenance dredging costs by decreasing the trapping effects of the intersection. The Colorado River Locks have an additional purpose: to raise the navigation traffic from the GIWW to the level of the river during flood stages for crossing the river and lowering the traffic to the level of the GIWW after crossing. Delay costs are estimated to exceed $1 million annually at each location. In addition, the 75-foot gated thruway is too narrow to accommodate the new modern wider barges posing a major safety threat. The crossing was designed when barges were carried astern on a towline rather than the current practice of pushing a string of barges, making navigation of the crossing more difficult. Many tows have to “trip” or break down and moor their barges while taking one barge across at a time, causing delays, particularly during high river stages. Currently, 17 to 25 million tons of commerce pass through these facilities each year. The Gulf Intracoastal Canal Association (GICA) and Texas Waterway Operators Association (TWOA) representing the GIWW users are very interested in improving navigation at these locations, and specifically requested funding for this study be added by Congress to the FY 2000 Appropriations Act. An initial appraisal of the entire 423-mile Texas section of the GIWW was completed in November 1989. The study objective is to formulate alternative plans that would reduce the navigation difficulties at the crossings, thus reducing the number of accidents, the resulting excessive damages to the facilities and barges, and traffic delays. Potential solutions for minimizing navigation delays and safety concerns include realigning the approaches to the crossings or increasing the width of the gates. The State of Texas, Texas Department of Transportation (TXDoT) is the non-Federal sponsor for this project. Although this study is fully Federally funded, construction of any recommended projects will be cost-shared with the Inland Waterways Trust Fund.

Fiscal Year 2002 funds are being used to continue feasibility phase studies. The estimated cost for the feasibility phase of the study is $8,900,000. Fiscal Year 2003 funds will be used to continue feasibility phase studies for the Colorado River Locks. The scheduled completion date for the Colorado River Locks interim feasibility study is September 2009, based on funding imitations. The scheduled completion date for the Brazos River Floodgates interim feasibility study is September 2013.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Sabine - Neches Waterway	3,995,000	1,799,000	709,000	400,000	1,087,000

The Sabine-Neches Waterway, Texas project is located in Beaumont, Orange, Port Arthur, and Sabine Pass in Jefferson and Orange Counties, Texas; and Cameron and Calcasieu Parishes, Louisiana. The Sabine-Neches Waterway is a 75 mile-long deep draft channel which extends from the 42-foot contour of the Gulf of Mexico through a jettied channel to Port Arthur, to Beaumont via the Neches River Channel, and to Orange via the Sabine River Channel. The Sabine-Neches Waterway serves the Ports of Port Arthur, Beaumont and Orange. Modifying the existing Sabine-Neches Waterway would result in a reduction in delays, increased safety, and increased efficiency of transporting commerce on the existing 40-foot deep waterway. Channel depths of 45, 50, and 55 feet will be investigated, as well as increased channel widths. A major effort in this study will be the coordination of environmentally suitable dredged material placement areas for construction materials, as well as for future channel maintenance. The Jefferson County Navigation District is the local sponsor for the 40-foot Project to Port Arthur and Beaumont, Texas, and the Orange County Navigation District is the local sponsor for the 30-foot Sabine River Project. The sponsor for this feasibility study is the Jefferson County Navigation District. The Feasibility Cost Sharing Agreement was executed on 6 March 2000.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study. Work being performed includes the plan formulation phase of the study. Fiscal Year 2003 funds will be used to continue the feasibility study. The study cost estimate indicates a feasibility phase cost of $7,740,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$ 7,865,000
Reconnaissance Phase (Federal)	$ 125,000
Feasibility Phase (Federal)	$ 3,870,000
Feasibility Phase (Non-Federal)	$ 3,870,000

The completion date for the feasibility phase of the study is April 2006.

SUBTOTAL NAVIGATION STUDIES	26,771,000	7,122,000	2,378,000	2,145,000	15,126,000

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

b. Flood Damage Prevention Studies: The amount of $930,000 is requested in Fiscal Year 2003 for continuation of five studies.

Texas

Bois d'Arc Creek, Bonham	1,270,000	110,000	126,000	100,000	934,000

Bois d'Arc Creek, a south bank tributary of the Red River at mile 611.0, has its source near Whitewright, Texas. The stream flows in a northeasterly direction about 58 miles to its confluence with the Red River. The basin has a maximum width of about 18 miles. The agricultural land within the basin is fertile and very productive. During the 1960's approximately 40 percent of the watershed was cultivated principally in cotton and corn with lesser amounts in oats, grain sorghums, alfalfa and pecans. The uncultivated areas in the watershed are largely devoted to pasture. Since the 1960's farm production in the area has shifted from cotton to soybeans and peanuts. Extensive flooding affects about 16,100 acres in the lower two-thirds of the basin. Approximately 3,000 acres below U.S. Highway 67 are subject to flooding from headwater overflow and from backwater during high stages along the Red River. The towns of Whitewright and Bonham lie within the basin. The land use within the Basin is essentially the same today as in the 1960's. During the 1960's several dam sites were studied for construction of a multipurpose reservoir, and a site near Bonham, Texas at river mile 43.1 was selected. The Bonham site is approximately 3.5 miles south of the town of Bonham, Texas, and would have controlled a drainage area of approximately 108 square miles. Previous studies concluded that a multipurpose reservoir project on the Bois d'Arc Creek at the Bonham site was economically feasible at that time. In letters dated 24 April 1995 and 16 March 1999, the city of Bonham, Texas, indicated their intent to share equally in the feasibility phase costs that may follow the reconnaissance study.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase and initiate the feasibility phase of the study. Funds requested for Fiscal Year 2003 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is $2,340,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 2,440,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$ 1,170,000
Feasibility Phase (Non-Federal)	$ 1,170,000

The reconnaissance phase was completed in October 2001. The feasibility phase of the study is scheduled to be completed in September 2011.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Buffalo Bayou and Tributaries (White Oak Bayou)	1,900,000	472,000	693,000	160,000	575,000

White Oak Bayou, a tributary of Buffalo Bayou, has a drainage area of about 113 square miles and lies entirely within Harris County, Texas. White Oak Bayou rises in west central Harris County and flows in a southeasterly direction, a distance of about 34 miles to its confluence with Buffalo Bayou. Its major tributaries are Little White Oak Bayou which enters from the north at mile 1.5, Brickhouse Gully which enters from the west at miles 14.3, Cole Creek which enters from the west at mile 17.3, and Vogel Creek which enters from the north at mile 12.4. The primary water resource problem of the study area stems from frequent flooding of residential properties along White Oak Bayou and its tributaries, which is expected to worsen as the area becomes more populated and residential and commercial areas grow. Damaging floods have occurred in the White Oak Bayou Basin in 1935 (the flood of record), 1968, 1969, 1970, 1972, 1979, 1981, 1982, 1983, 1984, 1989, 1992, 1998 and 2001. The 1998 event, from Tropical Storm Frances, produced up to 14 inches of rain, flooded 1,200 homes in this watershed, and caused over $100 million in damages in the Houston and Galveston areas. In June 2001 water from Tropical Storm Allison flooded an estimated 45,000 residences and caused approximately $1.76 billion in damages in the Greater Houston area. An estimated 1,656 businesses reported damages estimated at $1.08 billion. Colleges and businesses in downtown Houston sustained approximately $25 million in damages. There are over 7,000 structures subject to flooding in the 100 year (one percent chance) floodplain, with property values that exceed $400,000,000. The onetime occurrence of a 100 year (one percent chance) flood would cause property damages of approximately $258,000,000. The first 10.7 miles has been constructed as part of a Federal project authorized in FY 1954 and 1965. Due to extensive residential development of the flood plain and subsidence due to extraction of ground water, the project is not effective as constructed. A series of detention reservoirs and channel adjustments in the upper reaches could facilitate drainage in the watershed. The non-Federal sponsor, the Harris County Flood Control District (HCFCD), will perform the study under the authority of Section 211 of the Water Resources Development Act of 1996 (WRDA 1996), to consider the entire White Oak Bayou Basin, including segments where the Federal project has already been constructed.

The reconnaissance report was certified to be in accordance with policy in March 1999. Available funding is being used to reimburse the HCFCD for the Federal share of the costs for completion of the reconnaissance report (following execution of Buffalo Bayou and Tributaries the Feasibility Cost Sharing Agreement), and for Corps of Engineers' coordination expenses. Fiscal Year 2002 funds are being used to provide oversight and review to HCFCD on their feasibility study efforts. This District will also reimburse HCFCD for the Federal share of completed and approved work on the Feasibility Phase of the study. Fiscal Year 2003 funds will be used for completion and approval of the Feasibility Report. The preliminary estimated cost of the feasibility phase is $3,500,000, which is to be shared on a 50-50 basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Texas (continued)

Buffalo Bayou and Tributaries
(White Oak Bayou) (continued)

Total Estimated Study Cost	$ 3,650,000
Reconnaissance Phase (Federal)	$ 150,000
Feasibility Phase (Federal)	$ 1,750,000
Feasibility Phase (non-Federal)	$ 1,750,000

The reconnaissance phase is scheduled to be completed in May 2002. The feasibility study completion date is July 2006.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Freeport Hurricane Protection Levee	4,980,000	75,000	63,000	100,000	4,742,000

Freeport is part of the nine-city Brazosport area, and is the center of a highly industrialized complex, which includes petrochemical and other plants. It is also a deepwater port with related industries and a population of approximately 13,200 people. The project consists of a system of levees and pumping stations that protect about 42 square miles from inundation due to hurricanes and tropical storms. The request for the study was precipitated by a recent risk analysis study funded by the Dow Chemical Company. The request cites 6 major changes that have occurred since the original Corps study was completed in 1958: (1) industrial and residential property values have significantly increased, possibly 10 to 100 fold; (2) there has been a significant advancement in computer and modeling technology; (3) there is approximately an additional 40 years of actual hurricane data and analysis available; (4) the Brazos River Harbor and Navigation District and Corps' harbor dredging projects have significantly reduced the ponding area and capacity outlined in the 1958 study; (5) the Drainage District has added significant pumping capacity (3,000,000 gallons per minute) relative to the original constructed project; and (6) possible increased subsidence in the local coastal plain. The study was proposed because of higher flood plain elevations from hurricanes, tropical storms, and related events predicted by the Flood Insurance Administration (FIA) in the Freeport Area. Damages could exceed $100,000,000 if the current levees are overtopped. An initial appraisal was prepared to evaluate the Federal interest in pursuing a reconnaissance study to determine the adequacy of the hurricane flood protection levee at Freeport. The initial appraisal verified the validity of reviewing the current project in light of current flood levels projected by the FIA. The Sponsor for the project is the Velasco Drainage District. The FCSA is scheduled for execution in March 2002.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase of the study. If the reconnaissance report is certified to be in accordance with policy, Fiscal Year 2002 funds will also be used to initiate the feasibility phase of the study. Fiscal Year 2003 funds will be used to continue the feasibility study. The study will assess the engineering, economic, and environmental components of modifying the levees and pump capabilities. The preliminary estimated cost of the feasibility phase is $9,760,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$ 9,860,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$ 4,880,000
Feasibility Phase (Non-Federal)	$ 4,880,000

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Texas (continued)

Freeport Hurricane Protection Levee (continued)

The reconnaissance phase is scheduled for completion in March 2002. The completion date for the feasibility phase of the study is April 2013.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Mustang Bayou, Brazoria County	1,600,000	0	63,000	137,000	1,400,000

The project is located in Brazoria County, Texas. Reaches of the Mustang Bayou are continuing to be heavily developed, especially the area immediately west of Alvin. This area is prone to flooding. The project is to determine if there is a Federal interest in possible flood damage prevention measures on Mustang Bayou near the City of Alvin, Texas. Two previous studies have been conducted. A May 1989, Reconnaissance Report entitled "Fort Bend and Brazoria Counties, Texas – Flood Damage Reductions" determined that channel improvements to a 1.5 mile reach of the Bayou upstream from the City of Alvin would be economically justified with a benefit-to-cost ratio of 1.4. A supplemental report on Mustang Bayou completed in November 1992 concluded that channel improvements would not be economically justified with a benefit-to-cost ratio of 0.9 due to increased real estate costs, relocation expenses, and earthwork expenses. However, continuing development and major flooding due to recent storms, including Tropical Storms Frances (1998) and Allison (2001), point to a need to determine the current federal interest in flood damage prevention. The potential Local Sponsor for the Mustang Bayou project is Brazoria County. A Feasibility Cost Sharing Agreement is scheduled for execution in April 2003.

Fiscal Year 2002 funds are being used to initiate the reconnaissance study. Fiscal Year 2003 funds will be used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accordance with policy, funds requested for Fiscal Year 2003 will also be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $3,000,000, which will be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost is as follows:

Total Estimated Study Cost	$3,100,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$1,500,000
Feasibility Phase (non-Federal)	$1,500,000

The reconnaissance phase is scheduled to be completed in April 2003. The completion date for the feasibility phase of the study is September 2007.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Upper Trinity River Basin	10,810,000	7,520,000	756,000	433,000	2,101,000

The Upper Trinity River basin extends upstream from the confluence of the East Fork and the mainstem of the Trinity River, and has a drainage area of approximately 7,873 square miles and includes the Dallas-Fort Worth, Texas, Metroplex. This area had an estimated 2001 population of over 5.5 million. Urban development of the Metroplex has greatly exceeded original expectations. In turn, the magnitude of storm runoff has increased beyond the original values used in design of these existing floodway projects; and thus reducing their effectiveness. Further, future development trends within the Dallas-Fort Worth Metroplex stand to further worsen existing flooding potential. It is estimated that in the event of the Standard Project Flood, approximately 87,700 acres of flood plain properties within the Dallas-Fort Worth Metroplex would be inundated, resulting in an estimated $14.0 billion in damages. Major floods occurred May-June 1989 and in April-May 1990. In the April-May 1990 floods, over $300 million in flood damages occurred and three lives were lost. Flooding during January 1992 resulted in 9 deaths, over 200 homes and 12 businesses inundated, and millions of dollars in damages. In August 2001, a man drowned in West Fork of the Trinity River during a rain event. Existing flood control projects in the Upper Trinity River Basin prevented a total estimated $318 million in damages in 1989 and $4 billion in 1990. In 1990, all of the Corps lakes in the Upper Trinity River Basin were either close to the top of, or overflowing the spillway. The North Central Texas Council of Governments is the local sponsor representing sixteen communities, three counties, and the Tarrant Regional Water District. Study efforts have been directed to addressing improvements in the interest of flood protection, environmental restoration, water quality, recreation, and other allied purposes in the Upper Trinity River Basin with specific attention on the Dallas-Fort Worth Metroplex. Phase I of this two-phase feasibility study was completed in February 1995, which established base conditions. Preliminary plan identification completed during Phase I for flood control, environmental, and recreational projects identified 88 potential measures which are economically viable. The results of these analyses were compiled into an Information Paper that was formally released to the public on 6 February 1995.

The Information Paper served as the basis for gaining sponsor commitments for undertaking more detailed studies of potential projects. To date, Project Study Plans (PSP)/Project Management Plans (PMP) that establish specific project and specific study cost sharing have been developed for the Dallas Floodway and Stemmons North Industrial Corridor, Texas; Johnson Creek, Arlington, Texas; Fort Worth Sumps, Clear/West Fork Environmental Restoration, Fort Worth, Texas, Big Fossil Watershed, and Lake Worth Watershed, Texas. The Johnson Creek, Arlington, Texas Interim Feasibility Report was finalized in March 1999. The Dallas Floodway and Stemmons North Industrial Corridor, Texas, Interim Feasibility Study is scheduled for completion in December 2003. The Clear/West Forks Interim Feasibility Study was initiated in September 2000. The Big Fossil Watershed Interim Feasibility Study was initiated in February 2001. The Lake Worth Watershed Interim Feasibility Study was initiated in November 2001. The Riverside Oxbow study is a interim of the on-going Clear/West Fork Interim Feasibility Study under the

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Upper Trinity River Basin (continued)					
Upper Trinity. The Riverside Oxbow feasibility study is scheduled to be completed in December 2002. Additional Project Management Plans will be formalized prior to initiation of the feasibility studies for other potential projects where local sponsor interest prevails.					
Fiscal Year 2002 funds are being used to continue the Dallas Floodway and Stemmons North Industrial Corridor study, Clear/West Forks and Big Fossil studies. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the Dallas Floodway and Stemmons North Industrial Corridor Interim Feasibility Study, the multipurpose reevaluation of the Clear and West Forks of the Trinity River Basin, Big Fossil Watershed, continue the Lake Worth Watershed, and initiate a new study. The Feasibility Cost Sharing Agreement, as modified totals $20 million, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. Up to 100 percent of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:					
Total Estimated Study Cost	$ 20,810,000				
Reconnaissance Phase (Federal)	810,000				
Feasibility Phase (Federal)	10,000,000				
Feasibility Phase (non-Federal)	10,000,000				
The reconnaissance phase was completed in August 1990. As each study is completed, interim feasibility reports will be issued. The final Dallas Floodway and Stemmons North Industrial Corridor Interim Feasibility Study is scheduled for completion in December 2003. The overall feasibility study is scheduled for completion in September 2008.					
SUBTOTAL FLOOD DAMAGE PREVENTION STUDIES	20,560,000	8,177,000	1,701,000	930,000	9,752,000

c. Shoreline Protection Studies: None.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

d. Special Studies: The amount of $2,677,000 is requested for Fiscal Year 2003 for continuation of fourteen studies.

Kansas

Walnut and White River Watersheds	545,000	136,000	106,000	110,000	193,000

The Walnut River Basin covers about 2,000 square miles in southeastern Kansas. The Walnut River combines with the Arkansas River at Arkansas City, which flows across the Kansas-Oklahoma State Line within about 10 miles of Arkansas City. The city of Wichita is located immediately west of the basin. The US Fish and Wildlife Service (USFWS) estimated that Kansas has lost almost 50% of its wetlands since the 1980's, with the vast majority of the losses since 1950. The loss of these wetlands means urban and rural runoff previously "filtered naturally" before entering a watercourse now enters the stream directly. Undisturbed riparian habitat of timber, brush, grasses, and wetlands once existed along both banks of over 600 miles of primary watercourses within the basin. Through coordination with stakeholders and based on prior experience with basin studies, it was concluded that riparian habitat coverage and quality has significantly decreased, and losses are still occurring. The result is both a reduction in area and a major reduction in ecological system viability due to fragmentation. Some of the measurable losses include wildlife density, reductions in animal and plant species, and significant reductions in water quality. The recommended plan is a collection of standard ecosystem management measures to be implemented in a basin-wide riparian and riverine ecosystem restoration and preservation approach. About a dozen state and federal environmental agencies will participate as team members in the feasibility study. The feasibility study will identify ecosystem resources, evaluate the system qualities, determine past losses and current needs, and evaluate potential restoration and preservation measures. Justified collections of measures, that are found to be warranted and acceptable to the sponsor and the Federal government, will be recommended for implementation through a prioritized, multi-year, plan of incremental design and development. Such a plan is envisioned to limit potential project disruptions that might result from intermittent federal or state project funding. In part this plan will allow monitoring of implemented restoration measures, which will provide opportunities to revise and improve the application of standard best management practices for this basin application. The scope of the study will focus on basin floodplain resources, including riverine and riparian ecosystem components.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase and initiate the feasibility phase of the study. Funds requested for Fiscal Year 2003 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is $890,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Kansas

Walnut and White River Watersheds, Kansas (continued)

Total Estimated Study Cost	$ 990,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$ 445,000
Feasibility Phase (Non-Federal)	$ 445,000

The reconnaissance phase was completed in November 2001. The feasibility phase of the study is scheduled to be completed in September 2005.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Missouri					
Springfield	1,225,000	0	63,000	140,000	1,022,000

The study area is along Jordan Creek in the heart of the City of Springfield, Missouri. This is an urban stream and the city wishes to provide mostly nonstructural flood control and environmental restoration by constructing a greenbelt/floodway. The study would determine whether there is a Federal interest in environmental restoration and flood damage reduction measures in the study area. Possible solutions to water resource problems include non-structural flood damage measures, development of environmental and floodplain buffer zones along the river, creation of floodplain overflow wetlands, channel modification or clearing and snagging to improve channel capacities, and combinations of those alternatives. The City of Springfield understands the cost sharing requirements and would be the local sponsor. The FCSA is scheduled for execution in March 2003.

Fiscal Year 2002 funds are being used to fully fund the reconnaissance phase at full Federal Expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2003 will be used to continue into the feasibility phase of the study. The feasibility study will assess the engineering, economic, and environmental components of modifying Jordan Creek and the adjacent area. The preliminary estimated cost of the feasibility phase is $2,250,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,350,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$1,125,000
Feasibility Phase (Non-Federal)	$1,125,000

The reconnaissance phase is scheduled for completion in March 2003. The completion date for the feasibility phase of the study is September 2012.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Oklahoma					
Miami and Vicinity	2,545,000	420,000	214,000	380,000	1,531,000

Miami is in Ottawa County, OK, the north-easternmost county in Oklahoma and is located in the Grand (Neosho) River Basin. The Grand (Neosho) River and Tar Creek, an uncontrolled tributary, causes frequent flood damages to the communities of Commerce, Picher, and Miami, Oklahoma. Recent major flooding occurred in October 1986, March 1990, June 1990, July 1992, December 1992, May 1993, September 1993, April and May 1994, and June 1995. A reconnaissance report for the Miami, OK, and Vicinity , completed in 1989, identified a Federal interest in flood damage prevention measures for Miami, OK, and other areas of Ottawa County. However, a cost sharing sponsor for feasibility studies could not be identified and the study was placed in inactive status. In addition to flood problems, the communities also have problems resulting from mining activities, which occurred in the county in the early and mid 1900's. Heavy metals, including lead and other pollutants, contaminate flood waters. Commercial use of mine tailings for loose aggregate surfacing (gravel), has created significant losses in terrestrial and aquatic habitat and is the cause of an ongoing human health risk. Parts of Ottawa County have been designated as an Environmental Protection Agency (EPA) Superfund site and cleanup efforts are ongoing. The EPA's Tar Creek cleanup is a success story. The Governor's task force acknowledged a 50 percent reduction in high blood lead levels in the children of Ottawa County since this project started. However, significant water resource issues remain and will not be addressed by EPA efforts to reduce the human health risks. The Governor of Oklahoma created a task force to address water resource and other issues in Miami and Ottawa County, and a December 2001 letter signed by the Oklahoma Secretary of the Environment indicated a willingness to cost-share feasibility studies. Due to the magnitude and complexity of issues related to the Tar Creek watershed ecosystem, it is anticipated that various Federal and local governmental entities will be required to develop and implement a comprehensive watershed plan, with each agency being involved in accordance with its statutory authorities and funding capabilities. The Feasibility study would involve a team of Federal, state, Tribal, local government, and other interests to evaluate water resource problems in the Miami, OK, and Ottawa County vicinity and identify potential solutions, including ecosystem restoration measures. Study alternatives could include structural and non-structural flood damage reduction measures, creation of riverine corridors for habitat and flood storage, development of wetlands to improve aquatic habitat and other measures to enhance the quality and availability of habitat and reduce flood damages. Potential project sponsors include the community of Miami, Oklahoma, the Oklahoma Water Resources Board, the Oklahoma Department of Wildlife Conservation, and the Oklahoma Department of Environmental Quality. The potential sponsors have indicated their intent to share equally in the feasibility phase. The Oklahoma Water Resources Board would potentially be the lead if more than one sponsor is identified, their letter of intent is dated June 2001.

Fiscal Year 2002 funds of $25,000 are being used to complete the reconnaissance phase of the study at full Federal expense. If the reconnaissance study is certified to be in accordance with policy, Fiscal Year 2002 funds will also be used to initiate the feasibility phase of the study. Funds requested for Fiscal Year 2003 will be used to continue the feasibility

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Oklahoma

Miami and Vicinity (continued)

phase. The preliminary estimated cost of the feasibility phase is $4,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$4,645,000
Reconnaissance Phase (Federal)	445,000
Feasibility Phase (Federal)	2,100,000
Feasibility Phase (Non-Federal)	2,100,000

The reconnaissance phase is scheduled for completion in May 2002. The feasibility study is scheduled for completion in September 2007.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Oklahoma (continued)					
Oolagah Watershed	1,550,000	0	220,000	310,000	1,020,000

The study area includes the 4,339 square mile drainage basin of the Verdigris River Basin in southeastern Kansas and northeastern Oklahoma upstream of Oologah Lake, OK, a Corps of Engineers multipurpose lake. The study area also includes Elk City, Fall River, Toronto, and Pearson-Skubitz Big Hill Lakes in Kansas, all multipurpose lakes constructed by the Corps of Engineers. Oologah Lake was authorized by the Flood Control Act of 1938 for flood control, water supply, navigation, recreation, and fish and wildlife; construction was completed in 1974. The Verdigris River is on the State of Oklahoma's list of impaired waters due to siltation, suspended solids, and pesticides. Losses of aquatic habitat due to degradation of the lake and basin water quality are occurring at an increasing rate as the population around the lake increases and as development in the basin occurs. The State of Oklahoma has expressed concern about the loss of habitat, water quality, fish kills and the accompanying loss of tourism and other economic benefits for the region as a result of declines in the water quality and related aquatic habitat. An initial appraisal report to be completed in Fiscal Year 2002 using O&M funds is expected to identify a Federal interest in proceeding with feasibility studies to identify potential environmental restoration features for the Federal project and for the entire watershed. The feasibility study will identify potential measures to restore the ecosystem in the basin and will evaluate other water resource problems and potential solutions. Potential solutions include development of wetlands to provide habitat and improve water quality for aquatic ecosystems, restoration of riverine corridors, development of a comprehensive watershed plan, and other measures. The city of Tulsa has indicated their willingness to share equally in the feasibility phase cost. Other potential sponsors for the project are Tulsa County, Oklahoma, and the Oklahoma Water Resources Board.

Fiscal Year 2002 funds of $50,000 are being used to complete the reconnaissance phase of the study at full Federal expense. If the reconnaissance study is certified to be in accordance with policy, Fiscal Year 2002 funds will also be used to initiate the feasibility phase of the study. Funds requested for Fiscal Year 2003 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is $3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,050,000
Reconnaissance Phase (Federal)	50,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase is scheduled for completion in April 2002. The feasibility study is scheduled for completion in September 2007.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Oklahoma (continued)					
Red River Waterway	1,800,000	0	63,000	50,000	1,687,000

The study area consists of the reach of the Red River extending from Denison Dam, Texas to Index, Arkansas, a distance of approximately 245 river miles. The flows in the Red River through the study area usually vary from about 5,000 cubic feet per second (cfs) to about 60,000 cfs, depending on releases from Lake Texoma. Average flows at the Index gage are 12,130 cfs. Flood control releases are usually limited to an amount which, when combined with downstream inflow, will not exceed bank-full capacities (approximately 58,600 cfs at the DeKalb gage) or cause excessive overbank flooding within the study reach. Operation of Lake Texoma's hydroelectric power facilities during normal conditions results in fluctuation of flows. During warmer months, weekday power releases average about 2,000 cfs. During weekends when there is little or no demand for hydroelectric power to augment steam-electric generating plants in the market area, power releases are made as required for pollution abatement and aquatic life. The restoration study would address natural resource losses due to current and prior Federal projects and programs. These resources include wetlands, bottomland hardwoods, and other riparian habitat. The Red River Valley Association and various other interests along the Red River have expressed an interest in exploring environmental restoration measures including creation of environmental corridors, environmental zones at old oxbow lakes, increased numbers of bottomland hardwoods and wetland creation to protect the riverine habitat in this reach of the river. Various types of bank stabilization would be used to protect the environmental zones and corridors from bank erosion. Potential cost-share sponsors for the feasibility phase that may follow the reconnaissance study are the Red River Authority of Texas and the Oklahoma Water Resources Board.

Fiscal Year 2002 funds are being used to fully fund the reconnaissance phase of the study at full Federal expense. Funds requested for Fiscal Year 2003 will be used to initiate the feasibility phase. The preliminary estimated cost of the feasibility phase is $3,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 3,500,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$ 1,700,000
Feasibility Phase (Non-Federal)	$ 1,700,000

The reconnaissance phase is scheduled to be completed in January 2003. The feasibility phase of the study is scheduled to be completed in September 2013.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Oklahoma (continued)					
Southeast Oklahoma Water Resource Study	3,586,000	153,000	182,000	100,000	3,151,000

The study area encompasses 29 counties in southeast Oklahoma, including the Kiamichi River Basin and other tributaries of the Red River. The reconnaissance study examined water resource related problems in southeast Oklahoma and found a federal interest in ecosystem restoration in the Kiamichi River Basin. The cumulative effects of land use changes in the basin have resulted in a loss of habitat for a number of aquatic species that are critical to the functioning of the riverine ecosystem. The reconnaissance study recommended proceeding to a cost-shared feasibility study with the Oklahoma Water Resources Board as the local sponsor. The reconnaissance report was certified in January 2001, and the Feasibility Cost Sharing Agreement was executed in August 2001.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2003 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is $6,952,000, which will be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 7,062,000
Reconnaissance Phase (Federal)	$ 110,000
Feasibility Phase (Federal)	$ 3,476,000
Feasibility Phase (Non-Federal)	$ 3,476,000

The reconnaissance phase was completed in July 2001. The feasibility phase of the study is scheduled to be completed in September 2015.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Oklahoma (continued)					
Wister Lake Watershed	1,550,000	0	236,000	50,000	1,264,000

The study area includes the 1888 square mile drainage basin of the Poteau River Basin in eastern Oklahoma that includes 993 square miles above Lake Wister, a multipurpose land constructed by the Corps of Engineers in 1949. Ecosystem degradation in the lake and in the basin, in general, is occurring primarily as a result of non-point source pollution from poultry operations, forestry practices, abandoned strip coal mines, and natural gas exploration operations. Losses of aquatic habitat due to degradation of the lake and basin water quality are occurring at an increasing rate as development in the basin occurs. Intense public concerns have been expressed about loss of habitat, water quality, fish kills and the accompanying loss of tourism and other economic benefits for the region. Water quality in Lake Wister is approaching hypereutrophication levels. Lake Wister serves as the primary water supply source for the population of LeFlore County, and is critical to the regional economy. An initial appraisal report to be completed in Fiscal Year 2002 using O&M funds is expected to identify a Federal interest in proceeding with feasibility studies to identify potential environmental restoration features for the Federal project and for the entire watershed. The feasibility study will identify potential measures to restore the ecosystem in the basin and will evaluate other water resource problems and potential solutions. Potential solutions include development of wetlands to provide habitat and improve water quality for aquatic ecosystems, restoration of riverine corridors, development of a comprehensive watershed plan, and other measures. The Oklahoma Water Resources Board has indicated their willingness to share equally in the feasibility phase cost that may follow the reconnaissance study. Other potential sponsors for the project would be the Poteau Valley Improvement Authority and the community of Poteau, OK. The study authority is the resolution of the Committee on Public Works of the United States House of Representatives, adopted 28 January 1955 which requests that the Chief of Engineers determine whether future improvements for flood control and allied purposes are advisable in the Poteau River Basin.

Fiscal Year 2002 funds of $50,000 are being used to complete the reconnaissance phase of the study at full Federal expense. If the reconnaissance study is certified to be in accordance with policy, Fiscal Year 2002 funds will also be used to initiate the feasibility phase of the study. Funds requested for Fiscal Year 2003 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is $3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,050,000
Reconnaissance Phase (Federal)	50,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Oklahoma (continued)

Wister Lake Watershed (continued)

The reconnaissance phase is scheduled for completion in May 2002. The feasibility study is scheduled for completion in September 2011.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas					
Guadalupe and San Antonio Rivers	6,075,000	500,000	411,000	300,000	4,864,000

The study area includes the Guadalupe and San Antonio River Basins. It is located in south central Texas, extending approximately 110 miles southeasterly from the headwaters in Kerr and Bandera Counties, to the terminus at the Gulf of Mexico in Refugio and Calhoun Counties. The Guadalupe Basin has a drainage area of 3,430 square miles, and the San Antonio River Basin has 3,096 square miles at this location. Flooding within various portions of the basin was severe in 1972 and in 1978, when portions of the river basins were declared disaster areas. Flooding again plagued the area in 1997, with total damages estimated at $1.9 million. In October 1998, the largest of all recent flood events within the region accounted for at least 31 deaths, and caused damages estimated to be $300 million. Many communities experienced inundation at rooftop levels, with water velocities great enough to completely demolish brick homes. The study consists of an investigation of the Guadalupe and San Antonio River Basins to address improvements in the interest of flood damage reduction, environmental restoration, water quality, water supply, recreation and other allied purposes. Both structural and nonstructural solutions will be investigated to reduce flood damages while addressing the environmental needs of the watershed. The proposed study is supported by the Guadalupe-Blanco River Authority, San Antonio River Authority, and the San Antonio Water System, which would act as the local sponsors and are willing to share in the feasibility study costs.

Fiscal Year 2002 funds are being used to initiate the Cibolo Creek Interim Feasibility Study, and investigation the potential of initiating interim feasibility studies at Salado and Leon Creeks. Fiscal Year 2003 funds will be used to continue the Cibolo Creek Interim Feasibility Study and investigate additional potential interim feasibilities. The preliminary estimated cost of the overall feasibility study is $11,150,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$11,650,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	5,575,000
Feasibility Phase (non-Federal)	5,575,000

The Cibolo Creek Interim Feasibility Study is scheduled to be completed in September 2006. The overall feasibility study is scheduled for completion in September 2012.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Lower Colorado River	13,230,000	1,639,000	598,000	600,000	10,393,000

The Lower Colorado River basin encompasses a geographic area of approximately 21,000 square miles, and includes portions of the following counties in Central and South Texas: Bastrop, Blanco, Burnet, Colorado, Fayette, Hays, Lampasas, Llano, Matagorda, Mills, San Saba, Travis, and Wharton. The northernmost reaches of the study area include the Highland Lakes upstream of Austin, while the southernmost boundary is the Gulf of Mexico. The study area is bounded by the Guadalupe, Lacava, and Colorado-Lavaca basins on the west, and the Brazos and Brazos-Colorado basins on the east. The major Texas metropolitan areas within the study boundaries are Austin, Bastrop, Bay City, Columbus, LaGrange, Marble Falls, and Wharton. In October 1998, widespread flooding and related damages occurred throughout the Lower Colorado River Basin. A major component of the basin is the Onion Creek watershed which originates in Blanco County, continues through Hays County, and then into Travis County, where the creek flows into the Colorado River. The Onion Creek study area is located in the Colorado River Basin, and within the rapid growing urban area of Austin, Texas. Onion Creek is the largest creek in the Austin area with a drainage area of 343 square miles, collecting flows from Williamson, Slaughter, Bear, Little Bear, Rinard, South Boggy, Marble and Cottonmouth Creeks and their tributaries. The creek has a long history of flooding dating back to 1869 and most recently in 1981, 1991 and 1998. Ten flood events have occurred since the turn of the century, resulting in extensive flood damages and the loss of seven lives. Flows in excess of the 100-year, one percent chance, event have occurred on two separate occasions, while the 50-year (two percent chance) event has occurred on two other occasions. The reconnaissance study of the Lower Colorado Basin identified several areas that have experienced severe flooding and present a very high risk for flooding catastrophe. In addition to Onion Creek, Shoal and Walnut Creeks, the Highland Lakes, and the city of Wharton have experienced increased flooding and alteration of wildlife habitats. Initially, a cost-shared basin-wide feasibility study will identify the problems, needs, and opportunities of the Lower Colorado River basin and focus on identifying problem areas where potentially viable implementation measures exist and a cost-sharing sponsor is available to cost-share interim feasibility studies. An interim feasibility study of Onion Creek is being conducted concurrently with the basin-wide study. Interim studies for Shoal and Walnut Creeks, the Highland Lakes, and the city of Wharton will be initiated upon successful negotiation of modifications to the Feasibility Cost Sharing Agreement. The Lower Colorado River Authority is the local sponsor for the feasibility study and will act on behalf of the cities of Austin and Wharton, Travis County, and other entities identified during the problem identification stage of basin-wide feasibility studies.

Fiscal Year 2002 funds are being used to continue the basin-wide feasibility study and a concurrent interim feasibility study for Onion Creek, and initiate the interim feasibility study for Wharton, Texas. The preliminary estimated cost of the overall feasibility phase and five additional interim studies is $26,210,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Fiscal Year 2003 funds will be used to continue the basin-wide feasibility study and

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Texas (continued)

Lower Colorado River (continued)

the Onion Creek and Wharton, Texas interim feasibility studies. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 26,335,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	13,105,000
Feasibility Phase (non-Federal)	13,105,000

The interim feasibility study for Onion Creek completion date is January 2005. The basin-wide feasibility study is scheduled for completion in September 2012.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Middle Brazos River	1,620,000	756,000	126,000	50,000	688,000

The study area is located within the middle portion of the Brazos River Basin, which is bounded on the northwest by the Clear Fork of the Brazos River and on the southeast by Yegua Creek, and includes all or part of 32 counties. The study area includes 19 Federal and non-Federal reservoirs. Urbanization and concurrent changes in land use to support the human environment have caused many changes in the ecological character of the Middle Brazos River Basin, and have resulted in significant adverse impacts to the natural environment. The reconnaissance study included three major sub-basins; the North Bosque, Leon and the Lampasas. The North Bosque sub-basin is the most impacted of the three at present. A trends analysis conducted during this study indicated that if the environmental conditions continue as they have for 30 years, the quality of the environment will continue to degrade in the future. Consequently, the North Bosque River has been placed on the 1998 Clean Water Act Section 303(d) list by the Environmental Protection Agency. The purpose of this study is to develop, evaluate and recommend plans for ecosystem restoration and water quality improvements. Downstream environmental damages occurred partially as a result of floodwater releases from both Federal and non-Federal reservoirs throughout the three major sub-basins in the Middle Brazos River watershed. These damages included destruction of wetlands along the river. In addition, sediment from erosion of riverbanks and loss of environmental habitats at the upstream reaches of existing Federal and non-Federal reservoirs resulted in a decrease in water quality. Potential solutions include possible ecosystem restoration projects in areas of all existing lakes in the Middle Brazos River Basin. Work to be performed consists of feasibility level studies to investigate alternatives to re-establish aquatic and wildlife habitats. Projects identified in the reconnaissance phase include the use of conservation easements, riparian corridor restoration, wetlands and combinations of these alternatives. The Brazos River Authority and the city of Waco, Texas, support the proposed study. The Feasibility Cost Sharing Agreement was signed by the Brazos River Authority on 30 September 1999. Fiscal Year 2002 funds are being used to continue the North Bosque Interim Feasibility Study and investigate other potential studies within the basin. Fiscal Year 2003 funds will be used to complete the North Bosque Interim Feasibility Study, and initiate other interim feasibility studies. The preliminary estimated cost of the feasibility phase is $2,220,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 2,730,000
Reconnaissance Phase (Federal)	510,000
Feasibility Phase (Federal)	1,110,000
Feasibility Phase (Non-Federal)	1,110,000

The North Bosque River Interim Feasibility Study is scheduled for completion in September 2003. The overall Middle Brazos River Feasibility Study is scheduled for completion in September 2013.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Nueces River and Tributaries	1,100,000	0	63,000	87,000	950,000

The Nueces River Basin lies in the southern part of Texas. The West Nueces River heads in Edwards County about 13 miles northwest of Rocksprings, Texas. The East Nueces River heads near the northwest corner of Real County about 16 miles northeast of Rocksprings, Texas and flows about 55 miles south to its confluence with the West Nueces River. The Nueces River then flows in a southeasterly direction and enters Nueces Bay near Corpus Christi, Texas. The Nueces River Basin has an overall length of approximately 235 miles, a maximum width of 115 miles, and has a total drainage area of 17,075 square miles. The Frio River is a principal tributary and drains the northeast edge of the Nueces River Basin. The Edwards Plateau accounts for about 20 percent of the basin and is recognized to have high potential for ground water recharge. Historic land use practices and current water management approaches have resulted in significant environmental degradation in the study area. Additionally, aquifer water is not sufficiently available to assure an adequate water supply to fulfill future needs in San Antonio and the surrounding area by recharging the Edwards Aquifer, on of San Antonio’s major sources of water. The study will evaluate the water resources in the study area for flood protection, environmental restoration, water quality, water supply, recreation, and other allied purposes. The preliminary estimated cost of the feasibility phase is $2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. The Nueces River Authority, Guadalupe-Blanco River Authority, San Antonio River Authority, San Antonio Water System, and the Edwards Aquifer Authority have expressed interest in being non-Federal sponsors of this study. Fiscal year 2003 funds will be used to complete the reconnaissance phase of the study. If the reconnaissance report is certified to be in accord with policy, Fiscal Year 2003 funds will be used to initiate the feasibility study. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 2,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

The reconnaissance phase is scheduled for completion in December 2002. The feasibility study is scheduled for completion in September 2012.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Resacas at Brownsville	2,950,000	75,000	205,000	200,000	2,470,000

The study area is located in the City of Brownsville along the Rio Grande in South Texas. The city is requesting a study of the resacas of the Rio Grande. Resacas are small lakes and reservoirs formed from the meandering of the Rio Grande, and are capable of providing a certain level of flood protection for the city (similar to detention reservoirs). During the past ten years, siltation and plant growth have reduced the capacity of the resacas, and the city would like to investigate economical ways of restoring and preserving the resacas as natural, low-cost, effective flood protection. In addition, noxious weeds, such as hydrilla and water hyacinth, are jeopardizing the only surface water supply for the city. Along with the Rio Grande, the City's resacas are the last vestige of usable surface water for the area. The resacas become more valuable as time passes given the unpredictable nature of the contaminated Rio Grande and the continuing drought conditions that have impacted all of South Texas. The study effort will evaluate the environmental restoration of the resacas, improved flood protection, and enhanced water storage. This study will be closely coordinated with the stakeholder members of the Consortium of the Rio Grande (CoRio) as part of the American Heritage Rivers Initiative. The Local Sponsor for the project is the City of Brownsville, who has indicated intent to share equally in the feasibility phase cost that would follow a successful reconnaissance study. The FCSA is scheduled for execution in February 2002.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase of the study. If the reconnaissance report is certified to be in accordance with policy, Fiscal Year 2002 funds will be used to continue into the feasibility phase of the study. The feasibility study will assess the engineering, economic, and environmental components of restoring the resacas. Work will include surveys, hydraulic analysis, water and sediment quality surveys, and benefit determinations. Fiscal Year 2003 funds will be used to continue feasibility studies. The preliminary estimated cost of the feasibility phase is $5,700,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$ 5,800,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$ 2,850,000
Feasibility Phase (Non-Federal)	$ 2,850,000

The reconnaissance phase is scheduled for completion in February 2002. The completion date for the feasibility phase of the study is June 2010.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Sabine Pass to Galveston Bay	5,735,000	126,000	441,000	250,000	4,918,000

The study area consists of approximately 92 miles of Gulf of Mexico shoreline in Jefferson, Chambers, and Galveston Counties along the upper Texas coast from Sabine Pass to San Luis Pass at the western end of Galveston Island. In the entire study area, over 200 houses and up to 40,000 people are affected by shore erosion, some catastrophically. The major problems identified in the reach to the north of Galveston Bay are potential destruction of nationally significant wetlands; damage to homes and commercial property; and significant damage to State Highway 87, caused by shoreline erosion. Interest has been expressed in a project to stabilize the shoreline and thus protect nationally significant wetlands and other resources immediately behind and protected by the beach. The area traverses 12 miles of the 81,700-acre McFaddin Marsh National Wildlife Refuge and approximately 2-1/2 miles of the 15,100-acre Sea Rim State Park. Sea Rim State Park is located in the easterly portion of the study area, approximately 10 miles west of Sabine Pass with McFaddin Marsh Refuge immediately to the west. Along the Galveston Island, Texas reach of the study area, erosion rates in excess of 8 feet per year are occurring beyond the limits of the seawall in Galveston, Texas. This erosion, if continued, will result in damages to a multi-owner condominium complex. It has been demonstrated that an economically feasible project could be developed as a result of studies completed in the mid-1980s for a Galveston Island Beach Erosion Study. A number of alternatives have been proposed, including beach nourishment and stone protection. The local Sponsors for the project are State of Texas, General Land Office of Texas, Galveston County, and Jefferson County. A Feasibility Cost Sharing Agreement was executed on 6 September 2001.

Fiscal Year 2002 funds are being used to initiate the feasibility phase of the study. Funds requested in Fiscal Year 2003 will be used to continue feasibility phase studies. The preliminary estimated cost of the feasibility phase is $11,300,000, which will be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$11,385,000
Reconnaissance Phase (Federal)	$ 85,000
Feasibility Phase (Federal)	$ 5,650,000
Feasibility Phase (non-Federal)	$ 5,650,000

The completion date for the feasibility phase of the study is September 2013.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Sulphur River Environmental Restoration	1,720,000	69,000	30,000	50,000	1,571,000

The study area includes the Sulphur River, beginning at Talco, Texas, near the upstream limits of the flood pool of Wright Patman Lake and extends to the upper reaches of the basin, including the North Sulphur River. The study area includes portions of Lamar, Delta, Hopkins, Franklin, Red River and Titus counties. The combination of increased flow velocities due to previous straightening and channelizing efforts along the North Sulphur River, highly erodible river banks, and significant land clearing upstream of Highway 37 has created a massive accumulation of sediment and debris downstream of Highway 37. The loss of a steady water supply for the original meanders and oxbows within the North Sulphur River system has caused degradation of aquatic and bottomland hardwood habitat values in these areas. The erosive action caused by increased flow velocities in the river channel is likely to threaten the structural integrity of at least nine bridges spanning the North Sulphur River. The duration of floodwater inundation on adjacent agricultural property, due to the inability of the lands to drain to the river because of river sedimentation, necessitates pumping floodwaters from these lands at a cost of up to $50,000 per year. Consequently, crop production has decreased while production costs have increased. The identified problems and needs within the study area show a trend of escalating flood damages and increased ecosystem degradation, creating greater potential for loss of life. Potential project alternatives include development of multi-purpose reservoirs located on the North Sulphur River for potential flood damage reduction, environmental restoration, and water supply; development of wetlands to provide habitat and improve water quality for aquatic ecosystems; restoration of riverine corridors; development of a comprehensive watershed plan; and other measures. As part of the 75th Texas Legislature, Senate Bill 1 was passed, which is a bottom-up regional planning process to address Texas water needs for the next 50 years. The Senate Bill 1 regional plans were completed in 2000, and the draft state Senate Bill 1 plan was issued in October 2001. The Region C and Region D (Northeast Texas Region) Plans and the draft state plans all recommend the development of Marvin Nichols reservoir. Marvin Nichols I would be constructed on the Sulphur River in Red River, Franklin, Titus and Morris Counties. The multi-purpose reservoir would include storage for water supply, which would be needed as early as 2015 to meet the anticipated needs of the Dallas/Fort Worth area. The feasibility study could encompass consideration of this project. Potential sponsors include the Sulphur River Basin Authority, the City of Dallas, and the Tarrant Regional Water District.

The preliminary estimated cost of the feasibility phase is $3,240,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Ongoing discussions are underway to identify a study sponsor. Fiscal year 2003 funds will be used to continue the feasibility phase. A summary of study cost sharing is as follows:

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Sulphur River Environmental Restoration (continued)					
Total Estimated Study Cost	$ 3,340,000				
Reconnaissance Phase (Federal)	100,000				
Feasibility Phase (Federal)	1,620,000				
Feasibility Phase (Non-Federal)	1,620,000				
The reconnaissance phase is scheduled for completion in August 2002. The feasibility study is scheduled for completion in September 2013.					
SUBTOTAL SPECIAL STUDIES	45,231,000	3,874,000	2,958,000	2,677,000	35,722,000

e. Comprehensive Studies: None.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

f. Project Review Studies: The amount of $453,000 is requested in Fiscal Year 2003 for continuation of two studies.

Texas

Gulf Intracoastal Waterway - Brazos River to Port O'Connor	4,850,000	2,997,000	510,000	225,000	1,118,000

The study area includes approximately 72 miles of the Gulf Intracoastal Waterway (GIWW) in Brazoria, Matagorda and Calhoun Counties, from the Brazos River near Freeport to Port O'Connor, Texas. Tonnage transported along this section of the GIWW totaled nearly 16 million tons in 1994, with petrochemicals as the major commodity shipped. This study will evaluate operational problems along this reach of the GIWW. An initial appraisal of the entire 423-mile Texas Section of the GIWW was completed in November 1989. Problems identified by users along this reach include difficulties navigating currents encountered as a result of river flows from the San Bernard River; shoaling in the open bay to landlocked transition area in Matagorda Bay; bank erosion and loss of wetlands; and deficiencies in mooring facilities and channel markers. Gulf Intracoastal Waterway Users have identified safety issues at the Matagorda Ship Channel crossing due to high shoaling rates and tidal currents. One possible solution to reduce navigation operational difficulties would be to relocate the channel across portions of Matagorda Bay. In order to expedite identifying a viable solution to these safety issues, the Matagorda Bay reach will be studied separately as an interim to the overall feasibility study. Solutions to other problems identified will be developed during the overall feasibility study. Possible modifications to the existing Environmental Impact Statement and development of long term dredged material plans will be addressed independently using Operation and Maintenance, General appropriations. The State of Texas is the non-Federal sponsor of the GIWW and continues to maintain a high interest in the waterway because of the economic importance of the waterway to the State and their responsibility to provide dredged material disposal areas. The GIWW is designated as part of the Nation's Inland Waterway System and qualifies for 50-50 cost sharing from the Inland Waterways Trust Fund for construction purposes. No feasibility cost sharing agreement is required, and all study costs are 100 percent Federal.

Fiscal Year 2002 activities will include detailed assessments of project and environmental problems, needs, and opportunities. Fiscal Year 2003 activities include continuation of feasibility analyses for the problem areas. The reconnaissance phase was completed in August 1998. The GIWW-Matagorda Bay Interim Feasibility Study is scheduled to be completed in March 2002. The completion date for the overall feasibility study is September 2007.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Gulf Intracoastal Waterway - Port O'Connor to Corpus Christi Bay	5,300,000	1,974,000	378,000	228,000	2,720,000

The study area includes approximately 79 miles of the Texas section of the main channel of the Gulf Intracoastal Waterway (GIWW), extending from Port O'Connor to the Kennedy Causeway at Corpus Christi Bay. Tonnage transported along this section of the GIWW totaled nearly 16 million tons in 1994. The purpose of this study is to evaluate operational problems and address environmental concerns along this reach of the waterway. Thirty-one (31) miles of this reach of the waterway are within the critical habitat of the endangered whooping crane. This segment has been addressed under a separate feasibility study for the Aransas National Wildlife Refuge, and is therefore excluded from consideration. Navigational difficulties caused by frequent shoaling at various locations within the remainder of this reach, traffic congestion near Port O'Connor, and the lack of navigational aids and mooring facilities have been previously identified by users as areas of concern. The State of Texas is the local sponsor of the GIWW and continues to maintain a high interest in the waterway because of the economic importance of the waterway to the State and their responsibility to provide dredged material disposal areas. The GIWW is designated as part of the Nation's Inland Waterway system, and therefore qualifies for 50-50 cost sharing from the Inland Waterways Trust Fund for construction of navigation improvements. Any potential environmental restoration projects identified by this study will require a cost sharing sponsor. Potential structural solutions may involve channel rerouting across Corpus Christi Bay, widening to relieve traffic congestion at Port O'Connor and Victoria Wye, stabilizing of banks in critical locations to relieve channel shoaling problems, and the coordination and locating mooring facilities for holding vessels during inclement conditions. Other solutions may include restoration of areas previously impacted by project construction or subsequent maintenance activities, restoration of wetland habitat lost as a result of project usage, and dredging of circulation channels between designated dredged material disposal areas.

Fiscal Year 2002 funds are being used to initiate design details, plan selection, construction costs, and to prepare the draft engineering appendix and environmental assessment. Fiscal Year 2003 funds will be used to finalize the engineering appendix and environmental assessment for inclusion in the Draft Feasibility Report. The reconnaissance phase was completed in June 1998. The project is designated as part of the inland waterways. No feasibility cost sharing agreement is required, and all study costs are 100 percent Federal. The completion date for the feasibility phase of the study is September 2008.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
SUBTOTAL PROJECT REVIEW STUDIES	10,150,000	4,971,000	888,000	453,000	3,838,000
TOTAL SURVEYS - CONTINUING	102,712,000	24,144,000	7,925,000	6,205,000	64,438,000
TOTAL SURVEYS	103,578,000	24,631,000	8,154,000	6,355,000	64,438,000

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - NEW

a. Environmental: The amount of $50,000 is requested for Fiscal Year 2003 to initiate PED activities on one project.

Texas

North Bosque River	315,000	0	0	50,000	265,000

The North Bosque Watershed is located within the middle portion of the Brazos River Basin, which includes Erath and Bosque Counties. Urbanization and concurrent changes in land use have facilitated many changes in the ecological character of the North Bosque River Basin, and have resulted in significant adverse impacts on the natural environment. A trend analysis indicated that if the environmental conditions continue as they have for 30 years, the quality of the environment will continue to degrade in the future. The North Bosque River Basin has been placed on the 1998 Clean Water Act Section 303(d) list by the Environmental Protection Agency. Downstream environmental damages occurred partially as a result of floodwater runoff from adjacent landowners throughout the basin. This project was developed under the Middle Brazos River Basin Feasibility Study. The Interim Feasibility Study for the North Bosque River, Texas is scheduled to be completed in October 2002. The plan of improvement consists of reforestation, construction of low-water dams, creation of conservation easements and wetland areas for the purpose of ecosystem restoration. Preconstruction Engineering and Design will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$ 420,000	Total Estimated Preconstruction Engineering and Design Costs	$ 420,000
Initial Federal Share	$ 315,000	Ultimate Federal Share	$ 273,000
Initial Non-Federal Share	$ 105,000	Ultimate Non-Federal Share	$ 147,000

The project is not authorized for construction. The cost sharing for construction of the project will be in accordance with Section 210 of the Water Resources Development Act of 1996. Local interests will be required to provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary in the construction of the project; contribute an additional amount in cash to bring the total non-Federal share of costs to a minimum of 35 percent; and bear all costs of operation, maintenance, repair replacement, and rehabilitation for the project.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas					
North Bosque River, Texas (continued)					
The feasibility phase of the study is scheduled to be completed in September 2003. Fiscal Year 2002 funds have been reprogrammed to another study. Fiscal Year 2003 funds will be used to initiate the Preconstruction Engineering and Design phase and for preparation of plans and specifications for the project. The schedule of completion of Preconstruction Engineering and Design is March 2008.					
SUBTOTAL NEW PED-ENVIRONMENTAL	315,000	0	0	50,000	265,000

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

b. Navigation: None

c. Flood Control: The amount of $100,000 is requested for Fiscal Year 2003 to initiate PED activities on one project.

Arkansas

May Branch, Fort Smith	1,800,000	0	0	100,000	1,700,000

May Branch lies entirely within the city limits of Fort Smith, Arkansas, which has a population of 73,000; and has a drainage area of 5.3 square miles. May Branch starts as an open channel that flows into a covered conduit storm sewer, which ends at the P Street pumping station, constructed by the Corps in 1948, that has an outlet through the Fort Smith Levee into the Arkansas River. The storm sewer was adequate until the 1930's when urbanization increased the amount of runoff, which routinely exceeds the capacity of the storm sewer. Flood runoff flows overland and ponds behind the levee until it is eventually evacuated. Average annual flood damages in the May Branch Basin are estimated at $5,840,000. Numerous floods have occurred, most notably during the spring of 1990, when an approximate 5 to 10-year flood event that caused an estimated $2.5 million in damages inundated 26 commercial and 44 residential units. The purpose of this study is to consider plans to alleviate the flooding, including a by-pass channel, channel widening, pump stations, detention basins, and additional relief openings through the levee. On November 13, 1998, the city of Fort Smith, Arkansas, the local sponsor, signed the Feasibility Cost Sharing Agreement, and has indicated they will cost share the preconstruction engineering and design phase.

PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25% non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design costs	$2,400,000	Total Estimated Preconstruction Engineering and Design Costs	$2,400,000
Initial Federal Share	1,800,000	Ultimate Federal Share	1,560,000
Initial Non-Federal Share	600,000	Ultimate Non-Federal Share	840,000

The project is not authorized for construction. The cost sharing for construction of the project will be in accordance with Section 103(a)(2) of the Water Resources Development Act of 1986, as amended. Local interests will be required to provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary in the construction of the project; pay five

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Arkansas					
May Branch, Fort Smith (continued)					

percent of the costs allocated to flood control in cash during the period of construction; contribute an additional amount in cash or credits to bring the total non-Federal share of costs allocated to structural flood control to a minimum of 35 percent; and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of the flood control facilities.

The feasibility study is scheduled to be completed in January 2003. Fiscal Year 2002 funds will be used to continue the feasibility phase of the study. Fiscal Year 2003 funds will be used to initiate the preconstruction engineering and design phase of the project. Preconstruction Engineering and Design is scheduled for completion in September 2011.

SUBTOTAL NEW FLOOD PREVENTION	1,800,000	0	0	100,000	1,700,000

d. Shoreline Protection: None.

e. Special Studies: None.

SUBTOTAL NEW PED	2,115,000	0	0	150,000	1,965,000

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

4. PRECONSTRUCTION ENGINEERING AND DESIGN (PED) - CONTINUING

a. Environmental: The amount of $100,000 is requested for Fiscal Year 2003 to continue PED activities on one project.

Texas

Colonias Along U.S. – Mexico Border	1,982,000	45,000	252,000	100,000	1,585,000

Colonias (or barrios) are extremely poor, unincorporated communities located within 100 kilometers of the U.S. - Mexico border. In the colonias water and sewer services are limited, as rapid population growth has occurred with little or no wastewater or water supply infrastructure development. The local utility companies have placed priority on potable water distribution with secondary emphasis on central wastewater collection and treatment. In the colonia, most residents use septic tanks or cesspools for sewage disposal. After many years of use, and with very little sewage disposal regulatory enforcement, septic tanks are failing and causing groundwater contamination or introducing raw sewage directly into the Rio Grande. Without the development of infrastructure, groundwater contamination, health risks, and other environmental, social, and economic problems will continue to increase within the study area. The Corps of Engineers would provide water-related environmental infrastructure planning and technical assistance for these colonias, located within the boundaries of the District, under the authority of Section 219 of the 1992 Water Resources Development Act. All work is done in coordination with the Texas Water Development Board (TWDB) and their Distressed Areas Program. Initial projects identified by the Texas Water Development Board (20 total) are: La Feria; Cameron County Rural Study (I); Cameron County – Valle Hermosa and Valle Escondido (I); and Cameron County Regional (II). The local sponsor for the technical support provided through this program is the State of Texas acting through the TWDB. The TWDB understands and is willing to cost share technical design activities in accordance with the provisions of Section 219 of the Water Resources Development Act of 1992.

Fiscal Year 2002 funds were utilized to coordinate with the Texas Water Development Board to negotiate and execute the Design Agreement, and to initiate planning and design activities for the high priority colonias identified by the TWDB. Fiscal Year 2003 funds will be used continue design activities. The preliminary estimated cost for providing technical assistance for four colonias is $2,643,000, which is to be shared on a 75-25 percent basis by Federal and non-Federal interests. A summary of the cost sharing is as follows:

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas					
Colonias Along U.S. – Mexico Border, Texas (continued)					
Total Estimated Study Cost	$2,643,000				
Initial Scoping (Federal)	40,000				
Technical Assistance (Federal)	1,942,000				
Technical Assistance (Non-Federal)	661,000				
Completion of technical assistance for all projects identified by the TWDB is September 2013.					
SUBTOTAL CONTINUING ENVIRONMENTAL	1,982,000	45,000	252,000	100,000	1,585,000

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

b. Navigation: The amount of $1,265,000 is requested for Fiscal Year 2003 to continue PED activities on four projects.

Texas

Cedar Bayou	562,000	0	77,000	310,000	175,000

Cedar Bayou is a small coastal stream that originates in Liberty County, Texas, east of Houston. It is navigable on the north end just below the Highway 146 bridge at mile 11 and meanders south along the eastern portion of the City of Baytown, Texas to Mile –2.5, at the intersection of the Houston Ship Channel (HSC). The Federally maintained section extends from its junction with the Houston Ship Channel near mile –2.5, eastward across Galveston Bay, to the mouth of Cedar Bayou to mile 3.0. Section 349 of the Water Resources Development Act (WRDA) of 2000 authorized a navigation channel improvement of 12-feet deep by 125-feet wide from mile –2.5 to mile 11 on Cedar Bayou subject to a determination by the Secretary of the Army, that the project is technically sound, environmentally acceptable and economically justified. The feasibility study is being prepared by the Local Sponsor in accordance with Section 203 of the WRDA 1986 (Public Law 99-662), and is to be completed in February 2002. The local sponsors for the project are the Chambers County Cedar Bayou Navigation District and the Liberty County Navigation District. They have expressed an interest in extending the project from Mile 3.0 to a point upstream to mile 11.0. One of the major industries, the Bayer Company, is proposing a $1 billion expansion that will require a navigation channel with approximate dimensions of 12’ X 125’ up to mile 11.0. The local sponsors are also interested in a number of bend easings in the existing channel to mile 3.0 to make navigation in the channel safer and more efficient. The recommended project, estimated to cost $16.2 million with an estimated Federal cost of $11.6 million and an estimated non-Federal cost of $4.6 million, includes the deepening and widening of the entire channel to mile 11 plus cutoff. The navigation channel will have a bottom width of 125 feet and side slopes of 1 on 3 (V:H) from the HSC to the upper end of the navigation channel at the state Highway 146 at Station 758+70. To alleviate congestion and delays resulting from a one-way channel, the plan also provides for straightening the channel between curve 15 and the upper end of curve 25 reducing travel distance by roughly 1.3 miles and a 200-ft wide passing area has been included for the one-way channel. The average annual benefits amount to $3.1 million. The benefit-cost ratio is 2.6 to 1 based on the latest economic analysis found in the preliminary draft Feasibility Report prepared by the Local Sponsor dated February 2001. The non-Federal sponsor is fully aware and supports the required concurrent cost sharing of Preconstruction Engineering and Design phase of the project. Preconstruction Engineering and Design (PED) costs will ultimately be cost shared at the rate for the project to be constructed but will be funded through the PED period at 25% non-Federal cost. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Texas

Cedar Bayou (continued)

Total Estimated Preconstruction Engineering and Design Costs	$ 750,000	Total Estimated Preconstruction Engineering and Design Costs	$ 750,000
Initial Federal Share	$ 562,000	Ultimate Federal Share	$ 562,000
Initial Non-Federal Share	$ 188,000	Ultimate Non-Federal Share	$ 188,000

The project is authorized for construction by Section 349 of the Water Resources Development Act of 2000. The Local Sponsor is required to provide lands, easements, and rights of way; and modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary, for the project. During the period of construction, the Local Sponsor is required to pay 10% of the cost of the general navigation features of the project, and an additional 10% payment of the cost of the general navigation features of the project over a period not to exceed 30 years following completion of the project.

Fiscal Year 2003 funds will be used to finalize design and prepare plans and specifications. Completion of the feasibility study is scheduled for February 2002. Completion of Preconstruction Engineering and Design is scheduled for December 2003.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Gulf Intracoastal Waterway - High Island to Brazos River	1,040,000	0	123,000	275,000	642,000

This reach of the Gulf Intracoastal Waterway (GIWW) includes approximately 85 miles of channels in Galveston and Brazoria Counties, from High Island at GIWW Mile 319 to its confluence with the Brazos River at Mile 405. Tonnage transported along this section of the GIWW totaled nearly 50 million tons in 1994, with petrochemicals as the major commodity shipped. Some of the problems identified by users along this reach include difficulties negotiating the two 90-degree bends west of the Highway 124 bridge at High Island causing steerage problems for tows, making it difficult for even one way traffic; High shoaling rates and associated transit delays at Rollover Pass; the area at Sievers Cove experiences periods of high wind and current causing navigation problems due to the limited clearance between the GIWW and placement area #41, limiting the barges ability to compensate for the wind and current; and problems arise at the Texas City Channel (west wye) due to width restrictions and defective channel markers. Waterway users often continue to the intersections of the Texas City Channel and the GIWW before turning towards Texas City crating an unsafe condition due to currents as tows maneuver a 120 degree turn into a congested area used by ocean-going, deep draft vessels; the cut through Pelican Island provides the last protected area for eastbound traffic before crossing the Galveston causeway. Tows often stop during fast moving tides and high winds, causing congestion at this mooring facility as vessels wait for safe passage through the Galveston causeway. Additionally moored barge s often extend out into the channel making passing through the area difficult requiring extreme care; additional moorings are needed west of the Galveston causeway as during periods of high winds, tows must push onto the bank in the sheltered area near Greens Lake and wait, sometimes for several days. The four miles between Cow and Halls bayous are areas of serious erosion where shoaling often reduces the channel width, limiting traffic to one way. The problem is compounded by cross currents. A feasibility report was completed in October 2001. The recommended project includes widening each of the three bends to 125 feet; constructing a rectangular sediment basin adjacent to the waterway at Rollover Bay; widening of the GIWW on the west side of Sievers Cove (East Bay Side) to give the operators additional room to compensate for wind and current and to avoid the private mooring basin located on the west side of the Cove (Bolivar side); abandon the existing west bend or channel leading from the GIWW to the Texas City Channel and widen the west side of the intersection between the GIWW and the Texas City Channel; move the existing moorings back from the channel allowing more room for the moored barges excavating the existing mooring basin for an additional 80 feet in width, maintaining a depth of –14 feet with a 2-foot over depth; excavating a mooring basin about 1,600 feet long, 155 feet wide, and –16 feet deep with –2 feet of over-dredge located within the mouth of Greens Lake; the reestablishment of land between West Bay and the GIWW by using semi-confined placement areas for dredged material where marshes would be established, widening the existing narrow buffer between the GIWW and West Bay providing environmental value. The estimated cost for the recommended plan is $28,700,000. The GIWW is designated as part of the Inland Waterway System. Construction costs for navigation improvements will be cost shared 50-50 from the Inland Waterway Trust Fund. The benefit to cost ratio is 2.8 to 1 based on the latest economic analysis dated October 2001. The

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Texas (continued)

Gulf Intracoastal Waterway -
High Island to Brazos River (continued)

State of Texas is the non-Federal sponsor of the GIWW and continues to maintain a high interest in the waterway because of their responsibility to provide dredged material disposal areas. The State's interest is evident through monthly meetings of the State-chaired Gulf Intracoastal Waterway Advisory Committee. The GIWW is designated as part of the Nation's Inland Waterway System, and qualifies for 50-50 cost sharing from the Inland Waterways Trust Fund for construction of navigation improvements.

The project is not yet authorized for construction. Fiscal Year 2002 funds were utilized to complete the Feasibility phase of the project. Fiscal Year 2003 funds will be used to initiate design activities and to initiate preparation of plans and specifications for the first construction contract. Completion of PED is scheduled for September 2005.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Gulf Intracoastal Waterway, Matagorda Bay	1,098,000	0	504,000	480,000	114,000

This reach of the Gulf Intracoastal Waterway (GIWW) extends from Channel Mile 454 to 473, a distance of about 19 miles. The GIWW leaves the landlocked portion on the eastern side of Matagorda Bay near Mile 454 and turns in a southwesterly direction before turning west and running parallel to Matagorda Peninsula. At Mile 471, the GIWW intersects with the deep-draft Matagorda Ship Channel (MSC). The GIWW enters the landlocked portion again at Port O'Connor near Mile 473. Historically, shoaling occurs at a rapid rate. Water depths in this area are naturally shallow and numerous oyster reefs characterize the area. The shoaling rate is probably the result of sediment movement by wind and tidal action between Matagorda Bay and West Matagorda Bay. At the reach between Mile 470 and Mile 472, where the GIWW intersects the MSC, dredging occurs almost annually, removing 200,000 - 300,000 cubic yards. The proximity of the GIWW to the natural pass of Pass Cavallo and the construction of the jettied entrance channel and deep-draft MSC has created hazardous navigation. The influences of the natural and man-made channels have created a dangerous crosscurrent at the intersection of the GIWW and MSC. To the south of the GIWW is Sundown Island, a National Audubon Society bird sanctuary. To the north is the dredged material placement site for the maintenance dredging operations. This has effectively limited the ability of barge traffic to maneuver to compensate for the crosscurrents and shoaling. Because of the various problems along this reach, the waterways industry has reported that numerous groundings have occurred and that vessels operate under reduced speeds to compensate for these problems. The industry is concerned about the continuing safety problems associated with this reach. As a result, industry has self-imposed one-way traffic in this reach. The most likely alternative continues along the existing alignment from mile 454 to mile 460; at mile 460 a new channel will be dredged in a westerly direction to the North of the existing alignment, generally paralleling the existing channel approximately 1.5 miles to the North. The realigned channel intersects the Matagorda Ship Channel approximately 1 mile north of the existing alignment. It turns sharply in a southwesterly direction in order to align with the existing GIWW at the Port O’ Connor Jetties. The existing channel from mile 460 to mile 473 would be abandoned. The proposed project is estimated to cost $15,000,000. The benefit to cost ratio is 1.6. The Texas Department of Transportation is the local sponsor for the Gulf Intracoastal Waterway (GIWW) and will provide disposal facilities. The GIWW has been designated as part of the inland waterways and therefore the project will be cost shared 50/50 with the Inland Waterways Trust Fund. The project is not authorized for construction. Fiscal Year 2002 funds were utilized to continue the Preconstruction Engineering and Design phase of the project. Fiscal Year 2003 funds will be used to initiate plans and specifications. The scheduled completion date for Preconstruction, Engineering and Design is October 2003.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Texas City Channel (50’ Project)	11,960,000	1,832,000	157,000	200,000	9,771,000

The project is located in Galveston Bay and serves the petrochemical industry to Texas City, Texas, which lies 10 miles northwest of Galveston and 35 miles southeast of Houston. The Texas City Channel is a 7.3-mile long deep draft channel extending from Bolivar Roads in Galveston Bay to Texas City, Texas. The channel has a protective rubble-mound dike, 28,200 feet long along the northerly side of the channel. The project also includes deepening the Texas City Turning Basin to 50 feet; enlarging the 6.5 mile long Texas City Channel to 50 feet by 600 feet; deepening the existing 800-foot wide Outer Bar and Galveston Entrance Channels to 52 feet; extending the Galveston Entrance Channel to a 52-foot depth for 4.1 miles at a width of 800 feet and an additional reach at a width of 600 feet to the 52-foot contour in the Gulf of Mexico; and establishment of 600 acres of wetland and development of water oriented recreational facilities on a 90-acre enlargement of the Texas City Dike. The benefit-cost ratio for this improvement is 3.1 to 1 as an individual modification based on October 1988 price levels and 8 5/8 percent interest rate. The Port of Texas City is essentially a crude oil importing facility, and development of a deeper channel has been a high priority of the local sponsor and the users since the oil crisis of the mid-1970's. The City of Texas City, Texas is the sponsor for the project. In response to local pressure, the Corps pursued the 50-foot Texas City Channel Project as an interim report to the Galveston Bay Area Navigation Study; however, the users withdrew their financial support for the project in August 1988. The Local Sponsor was then forced to ask that the project be deferred when financial support could not be found. By letter, dated March 1997, the City of Texas City indicated a renewed interest, financial support, and a willingness to cost share construction of the project.

The project is authorized for construction by the Water Resources Development Act (WRDA) of 1986. This would result in a non-Federal contribution of 25 percent of project construction costs (including design) for the depth up to 45' and 50 percent of the cost between 45-foot and 50-foot depths. In addition, the non-Federal sponsor would be responsible for 50% of the operations and maintenance costs beyond the 45-foot depths for a 50-foot project and be responsible for lands, easements, rights-of-way, and relocations; if their share does not equal 10 percent of the construction cost, a cash payment would be required for the difference.

Fiscal Year 2002 funds were used to conduct reconnaissance level studies to determine if the authorized project is justified and meets current needs. If the reconnaissance level report is certified to be in accord with policy, Fiscal Year 2003 funds will also be used to initiate reevaluation and environmental studies. The completion date for PED is currently scheduled for September 2013.

SUBTOTAL CONTINUING NAVIGATION	14,660,000	1,832,000	861,000	1,265,000	10,702,000

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

c. Flood Control: The amount of $1,000,000 is requested for Fiscal Year 2003 to continue PED activities on six projects.

Arkansas

Arkansas River Levees	1,900,000	935,000	118,000	50,000	797,000

The 42 Arkansas River levees in Arkansas protect 753,180 acres of rich alluvial land from flood damages. It is estimated that these levees have prevented more than $523 million in damages as of September 1994. Many of these levees have equaled or exceeded their economic life and are in need of culvert replacement and/or reconstruction. The Arkansas River Basin, Arkansas and Oklahoma, Feasibility Report, completed in May 1991, lists 14 levee units in Arkansas which were found to be economically justified to be rehabilitated. The report stated that completion of reconstruction of these levees would prevent more than $3.8 million in damages annually. Failure of these levees would allow flooding in the cities of North Little Rock, Fort Smith, and Van Buren. In North Little Rock, the City Hall, banks, businesses, homes, and the new Alltel Arena would incur major damages. In western Arkansas, three specific areas having flooding problems are residential developments in the Riverlyn community along the right bank of the Arkansas River, flooding in the Van Buren area, and areas of flooding located along the south side of the Arkansas River downstream of Fort Smith where there are no existing Federal flood control levees. Recent flooding along the Arkansas River in the area of Fort Smith occurred in 1986 and 1990, resulting in $3,270,000 and $1,720,000 of damages, respectively. The total cost in FY 1991 dollars for construction of the levees is $4,634,000. Each levee has a separate benefit-to-cost ratio that exceeds 1.06 with the average for all projects of more than 8.0, based on the latest economic analysis dated May 1991. Five levee districts, listed below, have expressed their willingness to participate and understand their requirements to cost-share construction of these levees.

The project is authorized for construction under Section 110 of the Water Resources Development Act of 1990. The cost sharing for construction of the project will be in accordance with Section 103(a)(2) of the Water Resources Development Act of 1986. Local interests will be required to provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary in the construction of the project; pay five percent of the costs allocated to flood control in cash during the period of construction; contribute an additional amount in cash or credits to bring the total non-Federal share of costs allocated to structural flood control to a minimum of 25 percent; and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of flood control facilities.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Arkansas

Arkansas River Levees (continued)

Fiscal Year 2002 funds are being used to complete the Limited Reevaluation Report, and to initiate preparation of the final design and plans and specifications for the following five levee districts: North Little Rock levee and floodwall; Pope County Number 2, Conway County Number 1, Fort Smith Number 1, and Van Buren Number 1. Fiscal Year 2003 funds will be used to continue work on these levees. The completion date for Preconstruction Engineering and Design activities for all levees is scheduled to be completed in September 2011.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Arkansas (continued)					
North Little Rock, Dark Hollow	1,800,000	625,000	315,000	200,000	660,000

The Dark Hollow area is located entirely within the city limits of North Little Rock, Arkansas. The area is comprised of approximately 2,000 acres of residential, commercial, and industrial activities. The residential areas contain about 600 units, which are occupied primarily by lower income families. About two-thirds of the homes are owner occupied. The major flood problem results from lack of an adequate outlet facility. The existing outlet facility, the Redwood Tunnel, has the capacity for carrying runoff from storms only up to a 2-year frequency. In addition, the Redwood Tunnel, which was constructed in the early 1900's, is in poor condition, and the city of North Little Rock fears that failure of the tunnel will occur in the near future. Recent engineering examinations by the city indicate that the tunnel is severely deteriorated. Studies completed in the mid-1980 have identified a Federal interest in proceeding with design for the project. Ongoing studies are being conducted to determine Federal interest in construction of the recommended plan. The recommended plan includes alteration of existing bridges and construction of a new channel outlet to replace the existing Redwood Tunnel, at cost estimated to be $30 million. The city of North Little Rock understands the cost sharing requirements and has indicated their intent to cost share in the Preconstruction Engineering and Design (PED) phase of the project. The Design Agreement was executed 30 May 2000. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25% non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$2,400,000	Total Estimated Preconstruction Engineering and Design Costs	2,400,000
Initial Federal Share	1,800,000	Ultimate Federal Share	1,560,000
Initial Non-Federal Share	600,000	Ultimate Non-Federal Share	840,000

The project is authorized for construction by the Water Resources Development Act (WRDA) of 1999. The cost sharing for construction of the project will be in accordance with Section 103(a)(2) of the Water Resources Development Act of 1986, as amended. Local interests will be required to provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary in the construction of the project; pay five percent of the costs allocated to flood control in cash during the period of construction; contribute an additional amount in cash or credits to bring the total non-Federal share of costs allocated to structural flood control to a minimum of 35 percent; and bear all costs of operation, maintenance, repair replacement, and rehabilitation of the flood control facilities.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Arkansas (continued)

North Little Rock, Dark Hollow (continued)

Fiscal Year 2002 funds are being used to continue Preconstruction Engineering and Design activities including design of the recommended plan. Fiscal Year 2003 funds will be utilized to continue design on the project. Completion of Preconstruction Engineering and Design is scheduled for completion in September 2005.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Arkansas (continued)					
Pine Mountain Lake	790,000	53,000	126,000	150,000	461,000

The proposed project consists of construction of a dam and lake at mile 35.7 on Lee Creek 12 miles north of Van Buren, Arkansas, in Crawford County. Existing authorization provides for construction of a lake for flood control, water supply, and recreation. The lake would control runoff from 168 square miles. Capacity would be 261,000 acre-feet, of which 93,000 would be for flood control, 168,000 for water supply, fish and wildlife mitigation and recreation. The project would provide an adequate degree of flood protection on Lee Creek downstream from the dam; municipal and industrial water supply of 60 million gallons daily; and recreational opportunities in an area which according to the Arkansas Game and Fish Commission, has the greatest need in the State for additional fishing and recreational areas

Preconstruction Engineering and Design (PED) was suspended in 1980 because the sponsor, the city of Fort Smith, did not provide assurance of local cooperation. Much of the general design was complete and a preliminary Environmental Impact Statement was nearing completion when work was suspended. At that time, the estimated total project cost was $63,600,000 with an estimated Federal cost of $18,100,000 and an estimated non-Federal cost of $45,500,000. The benefit-cost ratio was 1.3 to 1 based on the latest economic analysis dated October 1981. A new sponsor, the River Valley Regional Water District, in December 1999 requested the planning and design on the project be completed. They understand the cost sharing requirements and indicated that they would cost share the project. PED will ultimately be cost shared at the rate for the project to be constructed, but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design costs	$1,053,000	Total Estimated Preconstruction Engineering and Design Costs	$1,053,000
Initial Federal Share	790,000	Ultimate Federal Share	790,000
Initial Non-Federal Share	263,000	Ultimate Non-Federal Share	263,000

The project is authorized for construction by the Flood Control Act of 1965. Cost sharing for the project will be in accordance with the provisions of the Water Resources Development Act of 1986, as amended. Local interests will be required to provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary in the construction of the project; pay five percent of the costs allocated to flood control in cash during the period of construction; contribute an additional amount in cash or credits to bring the total non-Federal share of costs allocated to structural flood control to a minimum of 25 percent; bear all costs of operation, maintenance, repair, replacement, and rehabilitation of flood control

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Arkansas (continued)

Pine Mountain Lake (continued)

facilities; and pay for the costs allocated to the initial water supply. With reference to the provisions of PL 89-72, the Federal Water Projects Recreation Act, all lands required for the Pine Mountain Lake, while largely privately owned, are located within the boundaries of the Ozark National Forest and cost sharing by local interests will not be required. The 1976 Water Resources Act specifically states that “notwithstanding any other provisions of law, the Pine Mountain Lake on Lee Creek, Arkansas and Oklahoma, authorized by Section 204 of the Flood Control Act of 1965 shall be constructed, operated, and maintained in accordance with the Federal Water Projects Recreation Act (PL 89-72).” Accordingly, there is no requirement for recreation cost sharing on the project since all lands required for Pine Mountain Lake are located within the boundaries of the Ozark National Forest. Under the terms of a Memorandum of Agreement signed by Sec/Army and Sec/Agriculture 13 August 1964, and pursuant to a further commitment on 7 August 1967 by the Forest Service of its intentions, the responsibility for developing and managing the project-associated land and resources, including water-oriented recreation, will be assigned to the U.S. Forest Service with the exception of lands and waters in the immediate vicinity of the dam site. The District Commander will, however, continue to participate in the planning to the extent of assuring that adequate provisions will be made for public use of the lake. At the time construction is initiated, the lands required for project purposes, including public access and use, will be acquired by the Corps of Engineers. Lands required for public use and development will subsequently be made available to the Forest Service.

Fiscal Year 2002 funds will be used to conduct a reconnaissance level study at full Federal expense to determine if the authorized project is justified and meets current day needs. If the report is certified to be in accord with policy, Fiscal Year 2003 funding will also be used to initiate general reevaluation studies for the project. Preconstruction Engineering and Design is scheduled for completion in September 2008.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas					
Greens Bayou, Houston	7,260,000	6,612,000	238,000	150,000	260,000

Greens Bayou, excluding its tributary of Halls Bayou, drains about 154 square miles in the north central area of the Buffalo Bayou watershed. The area is subject to rainstorms throughout the year and urban flooding is a common occurrence. About 10,967 homes and businesses are currently subject to flooding by the Standard Project Flood (SPF), and about 7,100 of these properties would be subject to flooding by a 100-year frequency flood. On an average annual basis, stream flooding could cause about $17,800,000 in damages per year to existing properties. Greens Bayou is one feature of a comprehensive flood control plan for the Buffalo Bayou watershed, which has six separate elements providing flood control on Carpenters, Greens, Halls, Hunting, Little White Oak, and Brays Bayous. Plan features for Greens Bayou include 25 miles of channel improvements, 14 miles of selective clearing, acquisition of flood-prone properties, and 4 flood detention basins. The proposed project would provide about 25-year flood protection, and would reduce average annual damages by 91.2 percent. Aesthetic vegetation would be included to improve environmental quality, and mitigation would be required to compensate for the loss of 48 acres of riparian fish and wildlife habitat, and for 194 acres of upland forest wildlife habitat. Recreation features incorporated into the plan include trails, picnic facilities, sports fields, canoe launching ramps, comfort stations and parking areas. The total first cost of the recommended plan, based on October 2000 price levels, is estimated at $274,120,000, with a Federal cost of $171,294,000 and a non-Federal cost of $102,826,000. The average annual benefits are estimated at $61,722,100 for flood control, and $1,901,800 for recreation. The benefit-cost ratio is 4.8 to 1 based upon the latest economic analysis dated August 1993 with cost updated to October 2000. The local sponsor for the project is the Harris County Flood Control District (HCFCD), a certified agent of the Harris County Commissioners Court in Texas. The HCFCD is a willing and viable local sponsor, and the cost sharing partner on two major flood control projects, Clear Creek and Sims Bayou, Texas, which are currently under construction.

The Water Resources Development Act of 1990 authorizes this project for construction. The cost sharing for construction of the project will be in accordance with Section 103(a)(2) of the Water Resources Development Act of 1986, as amended. Local interests will be required to provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities necessary in the construction of the project; pay five percent of the costs allocated to flood control in cash during the period of construction; contribute an additional amount in cash or credits to bring the total non-federal share of costs allocated to structural flood control to a minimum of 25 percent; and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of the flood control facilities.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Texas

Greens Bayou, Houston (continued)

Fiscal Year 2002 funds were used to continue preparation of the General Reevaluation Report. Fiscal Year 2003 funds will be used to complete the General Reevaluation Report and initiate the first set of plans and specifications. The scheduled completion date for Preconstruction Engineering and Design is September 2004.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
Raymondville Drain	2,560,000	311,000	472,000	250,000	1,527,000

The Raymondville channel provides a drainage outlet to the Laguna Madre for a large area in eastern Hidalgo and northern Willacy Counties. The flows of floodwaters in the basin are impeded by the relatively flat topography, inadequate drainage structures, irrigation canals that criss-cross the area in every direction and the lack of adequate outlets. Floodwaters inundate large agricultural areas, improved pastures, and urban areas for long periods, resulting in extensive damage to crops, properties, and structures. Floodwaters block transportation arteries causing interruption of economic activities, tourism, school attendance, and utility services. Flooding of sanitation facilities occurs periodically in many communities, contaminating water supplies resulting in health and safety problems to area residents. The area is subject to flooding from long-term accumulations of moderate rainfall as well as from torrential rainfall associated with tropical storms. Hurricane Beulah (1967), one of the largest in the history of the area, dumped more than 30 inches of rain in the Valley and caused approximately $131,500,000 (1 October 1998 price levels) in damages in Cameron, Hidalgo, and Willacy Counties. The authorized plan will provide improvements by enlarging existing channels, and constructing new channels, a total of 43.8 miles of channel work including a 3.88-mile long levee and diversion channel along the west side of the City to protect it from sheet flow up to the Standard Project Flood. The City of Raymondville would receive flood protection against a 100-year storm. The local sponsor, the Hidalgo County Drainage District No. 1, supports the project, and has confirmed by letter dated 12 September 1994 and in April 2001 their willingness cost share project construction. The project cost, based on October 1998 price levels, is estimated to be $107,800,000, with an estimated Federal cost of $80,850,000 and an estimated non-Federal cost of $26,950,000. The average annual benefits are estimated at $20,410,000 of which $4,011,000 is for drainage, $2,090,000 are rural flood control and $13,293,000 are urban flood control. The benefit-cost ratio is 4.5 to 1 based upon the latest economic analysis available with cost updated to October 2000. The local sponsor has requested the project be reformulated to provide protection to portions of Hidalgo County, in the vicinity of Edinburg, Texas. The revised project will be formulated to incorporate locally constructed flood control protection in Hidalgo County.

This is an element of the Lower Rio Grande Basin project, which was authorized for construction by the Water Resources Development Act of 1986. The cost sharing for construction of the project will be in accordance with Section 103(a)(2) of the Water Resources Development Act of 1986, as amended. Local interests will be required to provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary in the construction of the project; pay five percent of the costs allocated to flood control in cash during the period of construction; contribute an additional amount in cash or credits to bring the total non-federal share of costs allocated to structural flood control to a minimum of 25 percent; and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of the flood control facilities. The authorized project is dependent on implementation of lateral and on-farm drainage improvements to fully realize agricultural

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$

Texas (continued)

Raymondville Drain (continued)

benefits and environmental protection. These improvements will be built during the economic life of the project. Continuing private investment is providing the on-farm improvements.

Fiscal Year 2002 funds were utilized to initiate general reevaluation studies of various alternatives for flood control and to review local sponsor developed hydraulic and hydrologic data for use in formulation of the recommended plan. Fiscal Year 2003 funds will be used to complete preliminary analysis and develop a recommended plan for the project. The scheduled completion date for Preconstruction, Engineering and Design is September 2007.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
South Main Channel	8,780,000	7,676,000	378,000	200,000	526,000

The South Main Channel is a major feature of the Lower Rio Grande Basin project, a comprehensive flood control drainage project for the two-county Valley region of Texas. The South Main Channel project is located in Hidalgo and Willacy Counties, Texas. Existing drainage is extremely limited throughout the Lower Rio Grande Basin, and flat topography, roads, railroads, irrigation canals, and inadequate outlets impede runoff. Floodwaters damage homes, businesses, and crops; block transportation; interrupt business, tourism, school attendance, and utility services; and increase rescue and repair activities. Under existing conditions the average annual flood damages are estimated at $12,237,000 (1 October 1995 prices). The area is subject to flooding from long-term accumulations of moderate rainfall as well as from rainfall associated with tropical storms. Hurricane Beulah (1967), one of the largest in the history of the area, dumped more than 30 inches of rain in the Valley and caused almost $128,168,000 (1 October 1995 price levels) in damages in Cameron, Hidalgo, and Willacy Counties. Numerous cities and communities and almost 500,000 acres of agricultural land were inundated by the storm. The authorized plan for the South Main Channel feature of the project, estimated to cost $233,470,000 based on October 2000 prices, including inflation, consisted of major outlet improvements which included enlargement of existing channels and construction of new channels totaling 113 miles. The authorized plan would provide flood protection for the cities of McAllen, Edinburg, Edcouch, La Villa and Lyford, as well as the rural areas of Hidalgo and Willacy Counties north of U.S. Highway 83. The average annual benefits for this feature amount to $17,744,000. The benefit-to-cost ratio is 1.45 to 1 based upon the 1985 Phase I General Design Memorandum with cost updated to October 2000 prices. Dates of assurances were initially received in November 1969 and reaffirmed in December 1980, July 1982, December 1989, and October 1993. Late in Fiscal Year 1999, one of the Local Sponsors, Hidalgo County Drainage District No. 1, withdrew support of the project. Currently, General Reevaluation Studies have been initiated to reformulate the project to meet the needs of the remaining local sponsor, Willacy County Drainage District No. 1. In August 1999, Willacy County Drainage District No. 1 restated their intent to cost share in project construction. The General Reevaluation report will be completed in February 2004.

The comprehensive flood control and drainage project for the region was authorized by the Water Resources Development Act of 1986. The cost sharing for construction of the project will be in accordance with Section 103(a)(2) of the Water Resources Development Act of 1986 as a separable element of the Lower Rio Grande Basin, Texas project. Local interests will be required to provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary in the construction of the project; pay five percent of the costs allocated to flood control in cash during the period of construction; contribute an additional amount in cash or credits to bring the total non-federal share of costs allocated to structural flood control to a minimum of 25 percent; and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of the flood control facilities.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional To Complete After FY 2003
	$	$	$	$	$
Texas (continued)					
South Main Channel (continued)					
Fiscal Year 2002 funds were utilized to continue General Reevaluation studies. Fiscal year 2003 funds will be used to complete General Reevaluation Studies, and to initiate plans and specifications. The completion date for Preconstruction Engineering and Design is September 2006.					
SUBTOTAL CONTINUING FLOOD CONTROL	23,090,000	16,212,000	1,647,000	1,000,000	4,231,000
c. Shoreline Protection: None.					
d. Multiple Purpose: None.					
TOTAL PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) CONTINUING	39,732,000	18,089,000	2,760,000	2,365,000	16,518,000
TOTAL PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED)	41,847,000	18,089,000	2,760,000	2,515,000	18,483,000
GRAND TOTAL - SURVEYS AND PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES	145,425,000	42,720,000	10,914,000	8,870,000	82,921,000

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Houston-Galveston Navigation Channels, TX (Continuing)

LOCATION: The project is located in the Galveston Bay system in Harris and Galveston Counties, Texas.

DESCRIPTION: The total project provides for a 45-foot project by enlarging the Houston Ship Channel to a depth of 45 feet and a width of 530 feet, and the Galveston Channel to a depth of 45 feet over a width which varies between 650 and 1,112 feet, and deepening the entrance channel to the Galveston Harbor and Channel to 47 feet over its original 800-foot width and 10.5 mile length, and extending the channel an additional 3.9 miles to the 47-foot bottom contour in the Gulf of Mexico along the existing alignment. Dredged material will be used for construction of environmental restoration sites to include approximately 118 acres of oyster cultch, 4,250 acres of marsh, and 6 acres of bird island.

AUTHORIZATION: Water Resources Development Act (WRDA) of 1996. Energy and Water Development Appropriations Act, 2001, as enacted by Section 1(a)(2) of P.L. 106-377 (Barge lanes).

REMAINING BENEFIT-COST RATIO: 3.6 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 7 5/8 percent. (Authorized Project)

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 7 5/8 percent. (FY 1996)

BASIS OF BENEFIT-COST RATIO: Benefits and costs are from the Limited Reevaluation Report and Supplemental Environmental Statement approved by HQUSACE in May 1996.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)	510,372,000		Entire Project	68	September 2009
Programmed Construction	510,372,000				
Unprogrammed Construction	0				
Estimated Appropriation Requirement(OFA)	3,953,000				
Programmed Construction	3,953,000				
Unprogrammed Construction	0				
Estimated Appropriation Requirement	514,325,000				
Programmed Construction	514,325,000				
Unprogrammed Construction	0				
Future Non-Federal Reimbursement	30,765,000				
Programmed Construction	30,765,000				
Unprogrammed Construction	0				
Estimated Federal Cost (Ultimate) (CoE)	483,560,000				
Programmed Construction	483,560,000				
Unprogrammed Construction	0				
Estimated Non-Federal Cost	173,375,000				
Programmed Construction	173,375,000				
Cash Contributions	140,608,000				
Other Costs:					
Berthing Facilities	9,296,000				
Lands and Relocations	1,073,000				
Credit	22,398,000				
Unprogrammed Construction	0				
Cash Contributions	0				
Other Costs	0				
Total Estimated Programmed Construction Cost	687,700,000				
Total Estimated Unprogrammed Construction Cost	0				
Total Estimated Project Cost	687,700,000				

PHYSICAL DATA – Total Project

Channels:
- Houston Ship Channel – 39.2 miles
- Galveston Channel – 3.8 miles
- Galveston Harbor Channel – 14.4 miles
- Barge Lanes – 26 miles

Beneficial use of Dredged Material
- Oyster Cultch – 118 acres
- Marsh – 4,250 acres
- Bird Island – 6 acres
- Offshore Underwater Berm
- Redfish Island – 4 acres

Division: Southwestern **District: Galveston** **Project: Houston-Galveston Navigation Channels, Texas**

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Allocations to 30 September 2001	$ 142,976,000				
Conference Allowance for FY 2002	33,785,000				
Allocation for FY 2002	28,385,000 1/				
Allocations through FY 2002	171,361,000			34%	
Allocation Requested for FY 2003	19,487,000			37%	
Programmed Balance to Complete after FY 2003	319,524,000 2/				
Unprogrammed Balance to Complete after FY 2003	0				

1/ Reflects $5,400,000 reduction assigned as savings and slippage.
2/ Includes $183,476,000 for deferred construction of environmental restoration sites.

JUSTIFICATION: The total project will include environmental restoration and will provide transportation savings from using larger or more efficient vessels, reduction in vessel casualties, and reduction of vessel delays. The average annual benefits for the Houston-Galveston project are $87,300,000, all commercial navigation, based on October 1994 price levels.

Annual Benefits	Amount
Navigation	$ 87,300,000
Total	$ 87,300,000

FISCAL YEAR 2003: Funds in the amount of $19,487,000 will be used in FY 03 as follows:

Continue Construction	$17,892,000
Federal Review of Land Acquisition	20,000
Cultural Resources	660,000
Planning, Engineering, and Design	100,000
Construction Management	815,000
Total	$19,487,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation		Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.		$ 1,017,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.		56,000	
Local service facilities necessary to realize benefits of the general navigation features		9,296,000	
Pay a percentage of the costs allocated to navigation improvements, to mitigate the project's adverse environmental impacts, and to pay a portion of the cost of operation, maintenance, and replacement of the project.		163,006,000	$604,000
General Navigation Features - Deep Draft	$70,428,000		
General Navigation Features - Shallow Draft	3,560,000		
Environmental Restoration	27,860,000		
Environmental Restoration - Deferred Const.	61,158,000		
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 year following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations, and dredged or excavated material disposal areas provided for navigation.		30,765,000	
Total Non-Federal Costs		$204,140,000	$604,000

STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement with the Port of Houston Authority was executed on 10 June 1998. Houston and Harris County voters approved a $130 million Port of Houston bond issued on 7 November 1989, by a 63 percent to 37 percent margin. The City of Galveston expressed their support for the total project by letters dated January 1987 and 30 October 1995. The Project Cooperation Agreement with the Port of Galveston has been tentatively scheduled for March 2003.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $510,372,000 is an increase of $34,904,000 from the latest estimate ($475,468,000) presented to Congress (FY 2002). This change includes the following items.

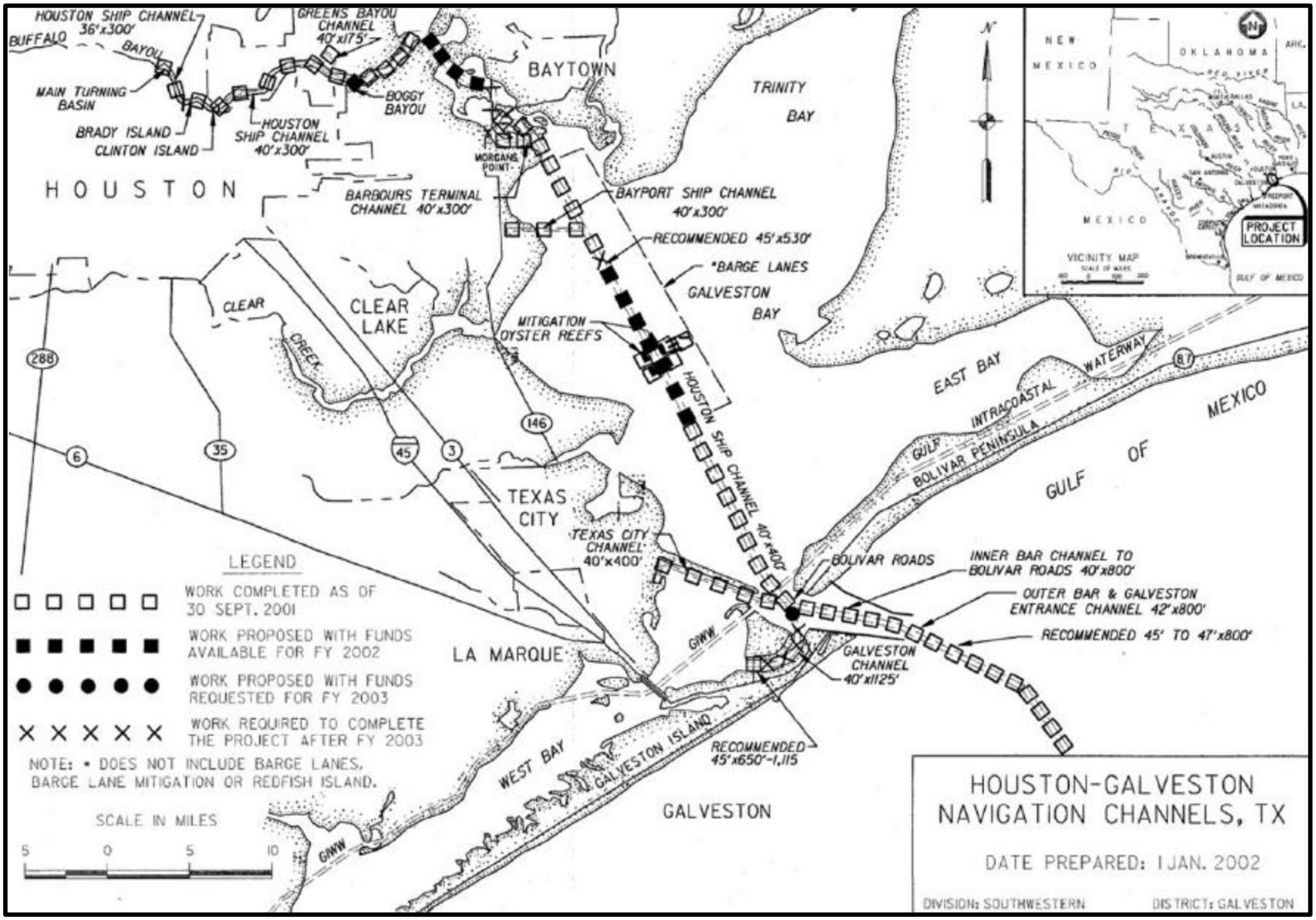
Item	Amount
Post Contract Award and Other Estimating Adjustments	$ (-)8,550,000
Increase in Level of Erosion Protection at Goat Island	31,651,000
Price Escalation on Construction Features	11,803,000
Total	$ 34,904,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (FEIS) was filed with the Environmental Protection Agency in 25 November 1988. A supplement to the FEIS has been prepared and was listed in the Federal Register on 24 November 1995.

OTHER INFORMATION: The total project as authorized by WRDA 96 included channel deepening of the Galveston Entrance Channel, Galveston Harbor and Channel and the Houston Ship Channel to Boggy Bayou in Houston, Texas.

Funds to initiate preconstruction planning were appropriated in Fiscal Year 1990. Funds to initiate construction were appropriated in Fiscal Year 1998.

The scheduled completion date of September 2009 for programmed work is a slippage from the latest completion date of September 2008 presented to Congress. This change is due to constrained budget ceilings.



Division: Southwestern **District: Galveston** **Project: Houston-Galveston Navigation Channels, Texas**

APPROPRIATION TITLE: Construction General – Navigation/Mitigation

PROJECT: Neches River Saltwater Barrier, Texas (Continuing)

LOCATION: The project is located on the Neches River in Jefferson and Orange Counties, Texas, about 7 miles north of the I-10 bridge and just south of the Big Thicket National Preserve at Beaumont, Texas.

DESCRIPTION: The project provides for a tainter-gated saltwater barrier structure, a sector-gated navigation bypass channel, and an access road and levee.

AUTHORIZATION: Water Resources Development Act (WRDA) of 1976.

REMAINING BENEFIT-REMAINING COST RATIO 5.5 to 1 at 7 1/8 percent.

TOTAL BENEFIT-COST RATIO: 4.88 to 1 at 7 1/8 percent.

INITIAL BENEFIT-COST RATIO: 4.88 to 1 at 7 1/8 percent (FY 2000).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Revaluation Report dated Dec 97 at Oct 1997 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT. OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
				Entire Project	45	September 2005
Estimated Federal Cost		$ 42,930,000				
Estimated Non-Federal Cost		14,310,000				
Cash Contribution	$8,470,000					
Other Costs	$5,840,000					
Total Estimated Project Cost		$ 57,240,000				

Allocations to 30 September 2001	$19,364,000	
Conference Allowance for FY 2002	11,000,000	
Allocation for FY 2002	9,242,000	1/
Allocations through FY 2002	28,606,000	67%
Allocation Requested for FY 2003	7,000,000	83%
Programmed Balance to Complete after FY 2003	7,324,000	
Unprogrammed Balance to Complete after FY 2003	0	

PHYSICAL DATA

Overflow Dam:
Neches River – at river mile 23
Relocations:
Cemeteries
Utilities
Roads
Lands & Damages:
Acquisitions, Condemnations, Appraisals
Tainter Gate Structure:
Clearing, Excavation, etc.

1/ Reflects $1,758,000 reduction assigned as savings and slippage.

JUSTIFICATION: Annually, the fresh water supply sources to the City of Beaumont and the Lower Neches Valley Authority (LNVA) are threatened by salt water intruding up the Neches River during periods of low river flow and high withdrawal rates by the water supply users. The Sabine - Neches Waterway project, constructed at 100 percent Federal costs, contributes to 75 percent of the saltwater intrusion. Upstream water supply withdrawals contribute to 25 percent of the saltwater intrusion. To avoid damages, the LNVA constructs temporary saltwater barriers in the Neches River and Pine Island Bayou. Although effective and economical, these barriers interfere with navigational and recreational use. However, these temporary barriers are unacceptable for environmental and navigation reasons as a long-term solution to the problem of salinity intrusion. This project will mitigate the saltwater intrusion impacts resulting from the Federal deepening of the Sabine - Neches Waterway. There are 26 industries in the Beaumont-Port Arthur area which use about 40 percent of the LNVA water (approximately 41 billion gallons annually). The type of industries range from refining petrochemical to tire and rubber, and raw products for resin. The industrial sector is entirely dependent on LNVA, and cannot accept water with more chloride than 150 parts per million (ppm) for processing, and 250 ppm for cooling. Additionally, high quality water is required for resin production. The area produces about 70 percent of resins (used for plastics) made in the United States.

Annual Benefits	**Amount**
Fish & Wildlife	$ 7,086,000
Other (Agricultural, Industrial, Municipal)	15,561,000
Total	$22,647,000

FISCAL YEAR 2003: The requested amount of $7,000,000 will be applied as follows:

Continue Construction	$ 6,545,000
Federal Review of Land Acquisition and Relocations	5,000
E&D During Construction	50,000
Construction Management	400,000
Total	$ 7,000,000

NON-FEDERAL COST: By letter dated 9 May 1997,the Assistant Secretary of the Army (Civil Works) approved the project plan be cost shared at 75/25 as a navigation mitigation project to mitigate for the adverse impacts the Sabine-Neches Waterway has had on area water supplies by contributing to salt water intrusion. The Assistant Secretary of the Army (Civil Works) also approved a 75/25 cost sharing for the Operations, Maintenance, Repair, Rehabilitation, and Replacement Costs in a letter dated October 27, 1999. The non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way necessary for Construction	$ 230,000	
Relocations determined to be necessary for implementation of the project	$ 5,610,000	
Cash payment during the period of construction	$ 2,100,000	
Voluntarily contribute additional cash during the period of construction to make the non-Federal contribution equal to 25% of the total project first cost	$ 6,370,000	
Operation, Maintenance, Repair, Replacement & Rehabilitation		$202,000
Total	$14,310,000	$202,000

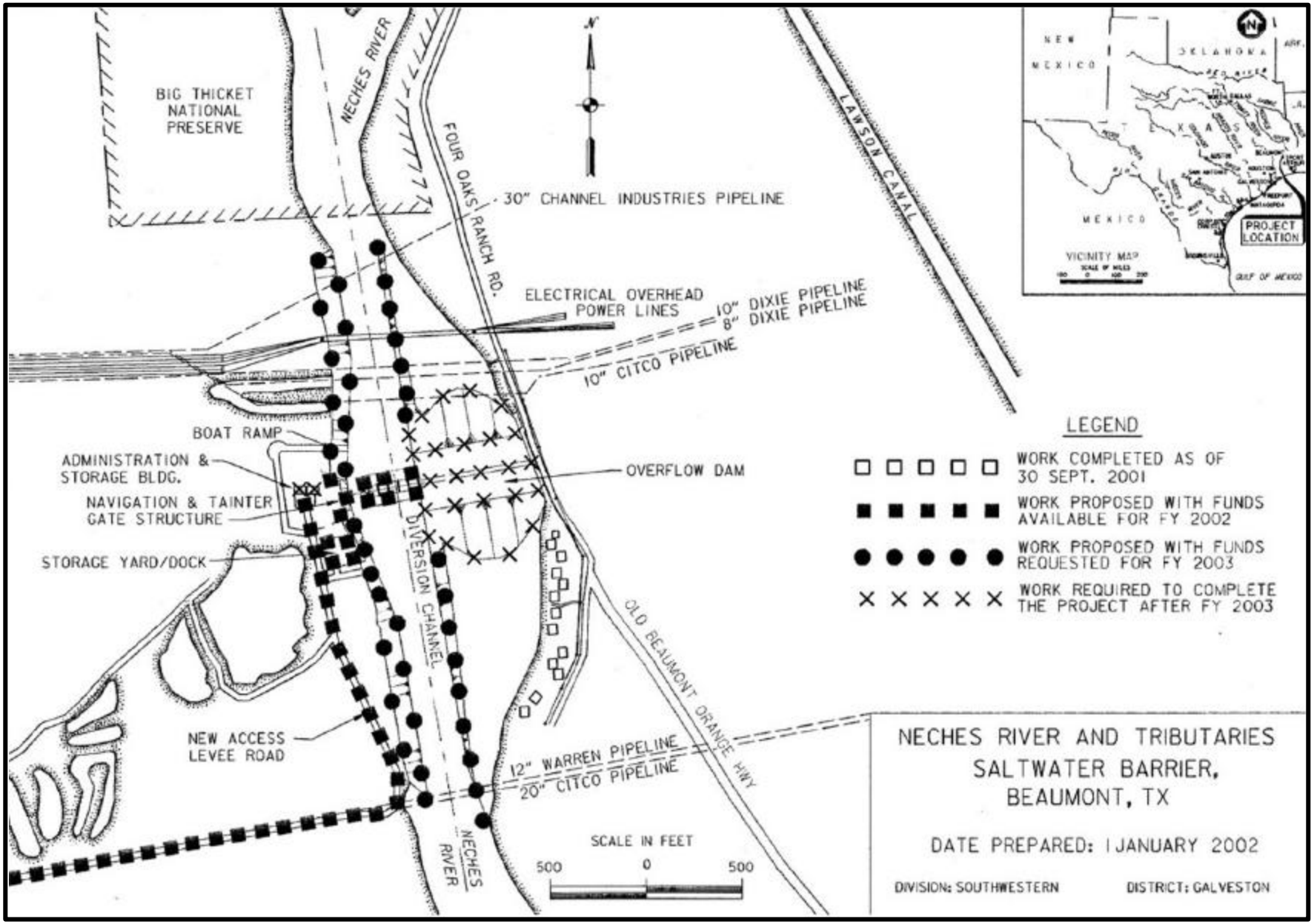
STATUS OF LOCAL COOPERATION: The sponsor for the navigation/mitigation project is Lower Neches Valley Authority (LNVA). The current non-Federal cost estimate of $14,310,000 for navigation/mitigation, includes a cash contribution of $8,470,000. In a letter dated September 20, 1991, the local sponsor expressed a renewed interest in the project. The Corps of Engineers requested a letter of assurance from the local sponsor and that letter was furnished on January 5, 1994. The letter confirmed the local sponsor’s awareness of the WRDA 86 cost-sharing provisions, provided assurance of project support and ability to financially support the project, and recommended expeditious undertaking of the project reevaluation. The Sponsor’s latest letter expressing their continued support is dated August 20, 1998. The Project Cooperation Agreement was executed May 22, 2000.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $42,930,000 is a decrease of $2,445,000 from the latest estimate ($45,375,000) presented to Congress (FY 2002). This change includes the following items:

ITEMS	AMOUNT
Price Escalation on Construction Features	(-)$2,445,000
Total	(-)$2,445,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A supplement to the Final Environmental Impact Statement was prepared as part of the phase I GDM dated July 1981. The draft Environmental Assessment contained in the General Reevaluation Report, completed in December 1997, concluded that the recommended plan would not have a significant adverse environmental effect on the quality of the environment. The final Environmental Assessment was completed in October 1998.

OTHER INFORMATION: The project, as authorized by the Water Resources Development Act of 1976, limited the local sponsor's share of the total project cost to $2,100,000. By memorandum dated 9 May 1997, the Assistant Secretary of the Army (Civil Works) concluded that the project be cost shared as a navigation mitigation project to mitigate for the adverse impacts the Sabine-Neches Waterway has had on area water supplies by contributing to saltwater intrusion. The authorizing documents found that the Sabine-Neches Waterway project, constructed at 100 percent Federal costs, caused 75 percent of the saltwater intrusion, and that 25 percent of the problem resulted from upstream withdrawals. On this basis, the Chief of Engineers Report recommended a Federal cost of 75 percent, and a non-Federal cost of 25 percent. The local sponsor has agreed to voluntarily contribute funds, under the authority of Section 4 of the River and Harbors Act of 1915, in excess of the $2,100,000 to make the non-Federal share of project costs equal to 25 percent of total project costs.



Division: Southwestern **District: Galveston** **Project: Neches River Saltwater Barrier, Texas**

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: McClellan-Kerr Arkansas River Navigation System, Locks and Dams, AR and OK (Continuing)
(Excluding Montgomery Point Lock and Dam)

LOCATION: The project is located in 15 counties in Arkansas and six counties in Oklahoma. The project begins at the confluence of the Mississippi and White Rivers and follows the White River and the Arkansas Post Canal a distance of 19 miles to the Arkansas River; thence up the Arkansas River 374 miles to the mouth of the Verdigris River; and thence up the Verdigris River to Catoosa, Oklahoma, a distance of 50 miles.

DESCRIPTION: The authorized project provides for the improvement of the Arkansas River and its tributaries by the construction of dams and channels to serve navigation, afford additional flood control, produce hydroelectric power, and provide related benefits, such as recreation and wildlife propagation. The navigation feature of the project consists of a 9-foot navigation channel from the Mississippi River to Catoosa, Oklahoma, 15 miles east of Tulsa.

AUTHORIZATION: River and Harbor Act of 1946, Water Resources Development Acts of 1974, 1986, and 1992.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio is not applicable because the project is nearing completion.

TOTAL BENEFIT-COST RATIO: See above.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 2-1/2 percent (FY 1963).

BASIS OF BENEFIT-COST RATIO: Benefits are from evaluation approved in July 1968 at 1968 price levels.

SUMMARIZED FINANCIAL DATA		**ACCUM PCT OF EST FED COST** (CofE Only)	**STATUS (1 Jan 2002)**	**PCT CMPL**	**PHYSICAL COMPLETION SCHEDULE**
Estimated Federal Cost (CoE)	$651,000,000		Entire Project	95	September 2010
Estimated Federal Cost (USCG)	2,268,000				
Estimated Non-Federal Cost	0				
Total Estimated Project Cost	$653,268,000				

SUMMARIZED FINANCIAL DATA (CONTINUED)

		ACCUM PCT OF EST FED COST
Allocations to 30 September 2001	616,536,000	
Conference Allowance for FY 2002	3,000,000	
Allocation for FY 2002	2,521,000 1/	
Allocations through FY 2002	619,057,000	95
Allocation Requested for FY 2003	3,360,000	96
Programmed Balance to Complete	28,583,000	
Unprogrammed Balance to Complete after FY 2003	0	

1/ Reflects $479,000 reduction assigned as savings and slippage.

PHYSICAL DATA

Channels: White River - 9.8 mi, 300' wide, mi 9.8 to 0.0

Arkansas Post Canal - 9.2 mi, 300' wide, mi 19.0 to 9.8

Arkansas River - 374 mi, 250' wide, mi 460.2 1940 survey) to 41.6 (1943 survey)

Verdigris River - 50.3 mi, 150' wide (1965 survey)

All navigation channels were excavated to an initial depth of 12' or more below normal pool level.

Locks: Type - Single Chamber, single lift with miter Gates

Size - 110' X 600'

Normal (maximum) Lift - Varies from 14' for Lock No. 4 to 30' for Lock No. 1.

Number of Locks and Dams - 11 on Arkansas River and canal, 2 on Verdigris River.

Dams: Movable nonnavigable type with low sills, piers, tainter gates, abutments, and overflow embankments where required.

Lands and Damages:
Acres: 126,501 Type: Predominately agricultural Improvements: Typical farm units

PHYSICAL DATA (CONT'D)

Relocations:

Roads:	18 miles	$45,280,000 (Includes replacing 9 bridges, alter 3 bridges, and abandon 1 bridge.)			
Railroads:	7 miles	$40,436,000 (Includes replacing 2 bridges, alter 6 bridges, and abandon 1 bridge.)			
Cemeteries, Utilities, and Structures:		$30,016,000	Entrance Channel		
(Conway Water Supply)		($21,324,000)	Levee: 3 miles		$13,932,000

JUSTIFICATION: The McClellan-Kerr Arkansas River Navigation System was conceived and authorized as an overall plan made up of a group of interrelated elements consisting of lakes, multiple-purpose structures, navigation structures, and bank stabilization works, all designed on a coordinated basis to provide for development of optimum benefits. In Oklahoma, construction of Keystone and Eufaula Lakes, Robert S. Kerr Lock and Dam, Webber Falls Lock and Dam and the initial and second phase of Oologah Lake are complete, as is construction of Dardanelle Lock and Dam and the Ozark-Jeta Taylor Lock and Dam in Arkansas and construction of bank stabilization and channel rectification between the Robert S. Kerr Dam in Oklahoma and the mouth. The project opened for navigation from the Mississippi River to the Port of Tulsa at Catoosa, Oklahoma in 1970. Completion of the navigation route was a significant benefit to the economy of the surrounding area. In 2001, an estimated 11,900,000 tons of cargo were moved on the navigation system. Of this traffic, 3,400,000 tons were inbound; 5,300,000 tons were outbound, 2,800,000 tons were moved internally; and 400,000 tons were through traffic. These movements included such commodities as rock, grain, iron and steel, chemicals, chemical fertilizers, coal, petroleum products, and sand and gravel. The average annual benefits, based on July 1968 price levels, are as follows:

Annual Benefits	Amount
Navigation	$40,470,000
Power	14,838,900
Channel Stabilization	6,575,000
Flood Control	6,602,600
Water Supply	828,900
Fish and Wildlife	312,000
Recreation	2,297,000
Area Redevelopment	3,355,800
Total	$75,280,200

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Land Acquisition	$3,360,000
Total	$3,360,000

NON-FEDERAL COST: Local interests are required to provide adequate terminal and transfer facilities for navigation and bear the increased cost of maintenance and operation of all altered rail and highway routes, including bridges and appurtenances and utilities and other existing improvements, other than federally owned.

STATUS OF LOCAL COOPERATION: Prior to authorization of the project, local interests furnished written assurances that they would construct suitable public terminals. The requirements relative to increased cost of maintenance and operation of altered facilities apply to the owners of these facilities and were covered during negotiations of relocations contracts for the alteration of the various facilities.

Laws enacted in 1959 by the States of Arkansas and Oklahoma authorized the organization and operation of port authorities and permitted political subdivisions to engage in port activities. Port authorities have been organized to develop facilities in Oklahoma for the Tulsa-Rogers counties and the city of Muskogee and these ports are in operation.

In the State of Arkansas, port authorities have been organized to develop public port and harbor facilities at Fort Smith, Van Buren, Clarksville, Dardanelle-Russellville, Morrilton, Little Rock, North Little Rock, Ozark, and Pine Bluff-Jefferson County Area. The Clarksville Port Authority has acquired a 28-acre tract of land for the development of its port facility. The Fort Smith, Little Rock, and Pine Bluff-Jefferson County Ports are in operation.

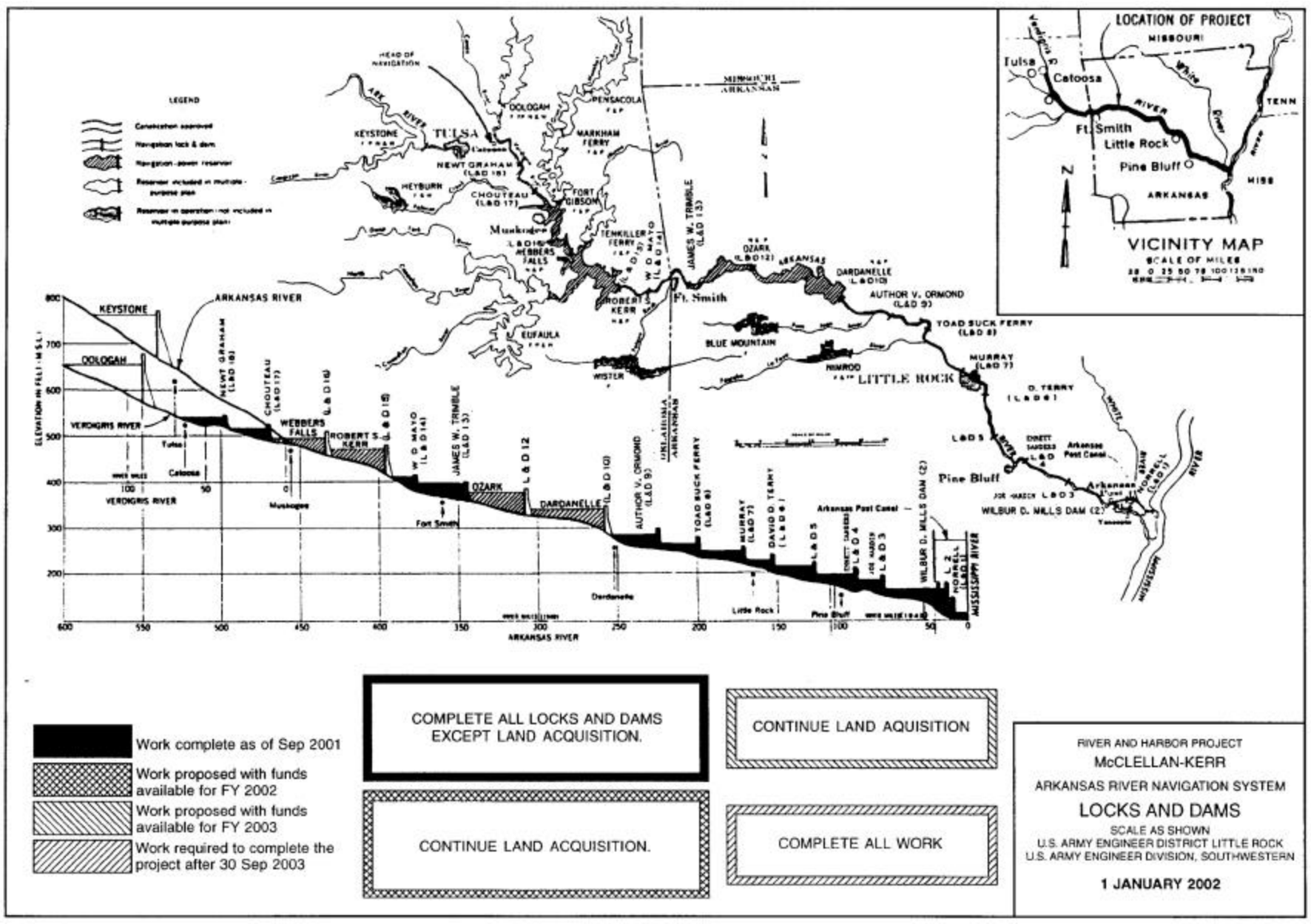
In addition to the public ports discussed above, 71 companies have developed private port facilities along the navigation route in the State of Arkansas.

There are no other cost sharing or repayment requirements applicable to the project.

COMPARISON OF FEDERAL (CORPS OF ENGINEERS) COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $651,000,000 is the same as the latest estimate ($651,000,000) submitted to Congress (FY2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The overall project is essentially complete and in operation. The Final Operating and Maintenance Environmental Impact Statement for the McClellan-Kerr Arkansas River Navigation System in the Little Rock District was filed with the Council on Environmental Quality on 6 March 1975. The final Environmental Impact Statement for Tulsa District was filed with the Council on Environmental Quality on 28 July 1975.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1949 and for construction in FY 1963. The Montgomery Point Lock and Dam is now a separate project and under construction.



Division: Southwestern **District: Little Rock** **Project: McClellan-Kerr Arkansas River Navigation System, Locks and Dams Arkansas and Oklahoma**

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Montgomery Point Lock and Dam, AR (Continuing)

LOCATION: This project is located in Desha County, Arkansas, on the White River approximately one half mile from the Mississippi River.

DESCRIPTION: The authorized project provides for the improvement of the Arkansas River and its tributaries by the construction of dams and channels to serve navigation, afford additional flood control, produce hydroelectric power, and provide related benefits, such as recreation and wildlife propagation. The navigation feature of the project consists of a 9-foot navigation channel from the Mississippi River to Catoosa, Oklahoma, 15 miles east of Tulsa. The Montgomery Point Lock and Dam will be the first lock and dam on the system.

AUTHORIZATION: River and Harbor Act of 1946.

REMAINING BENEFIT-REMAINING COST RATIO: 1.10 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 1.14 to 1 at 8 percent.

INITIAL BENEFIT-COST RATIO: 1.14 to 1 at 8 percent (FY 1997).

BASIS OF BENEFIT-COST RATIO: Benefits are derived from an evaluation report approved in January 1994 at 1 October 1993 price levels.

SUMMARIZED FINANCIAL DATA	
Estimated Federal Cost (CoE)	$262,000,000
Estimated Non-Federal Cost	0
Total Estimated Project Cost	$262,000,000

STATUS (1 Jan 2002)	**PCT CMPL**	**PHYSICAL COMPLETION SCHEDULE**
Entire Project	61	December 2008

SUMMARIZED FINANCIAL DATA (CONTINUED)

			ACCUM PCT OF EST FED COST
Allocations to 30 September 2001	$157,476,000		
Conference Allowance for 2002	23,000,000		
Allocation for 2002	18,824,000	1/	
Allocations through 2002	176,300,000		67
Allocation Requested for FY 2003	20,000,000		75
Programmed Balance to Complete	65,700,000		
Unprogrammed Balance to Complete after 2003	0		

1/Reflects $3,676,000 reduction assigned as savings and slippage, and $500,000 reprogrammed from project.

PHYSICAL DATA

Channels: White River - 9.8 mi, 300' wide, mi 9.8 to 0.0

Locks: Type - Single Chamber, single lift with miter gates
Size - 110' X 600' Lift up to 20 feet.
Normal (maximum) Lift - Varies from 14' for Lock No. 4 to 30' for Lock No. 1.

Dams: Movable navigable type with "bottom" operated gates

Lands and Damages:
Acres: 858 Type: Timber Improvements: None

JUSTIFICATION: The McClellan-Kerr Arkansas River Navigation System was conceived and authorized as an overall plan made up of a group of interrelated elements consisting of lakes, multiple-purpose structures, navigation structures, and bank stabilization works, all designed on a coordinated basis to provide for development of optimum benefits. The project opened for navigation from the Mississippi River to the Port of Tulsa at Catoosa, Oklahoma in 1970. The White River Entrance Channel, the first 10 miles of the McClellan-Kerr Arkansas River Navigation Project, is the only reach in the navigation system where the minimum stage is not controlled by a downstream dam, but by the stages of the Mississippi River. Changes on the Mississippi River have been observed for a number of years and have resulted in low water problems in the White River Entrance Channel. Construction of the Montgomery Point Lock and Dam will greatly increase the reliability of the system as requested by the users. A more reliable system should increase commerce to 35-45 million tons per year. The average annual benefits, based on October 1993 price levels, are as follows:

Annual Benefits	Amount
Navigation	$20,327,000
Area Redevelopment	700,000
Total	$21,027,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Construction of Lock and Dam	$17,960,000
Planning, Engineering and Design	540,000
Construction Management	1,500,000
Total	$20,000,000

NON-FEDERAL COST: None

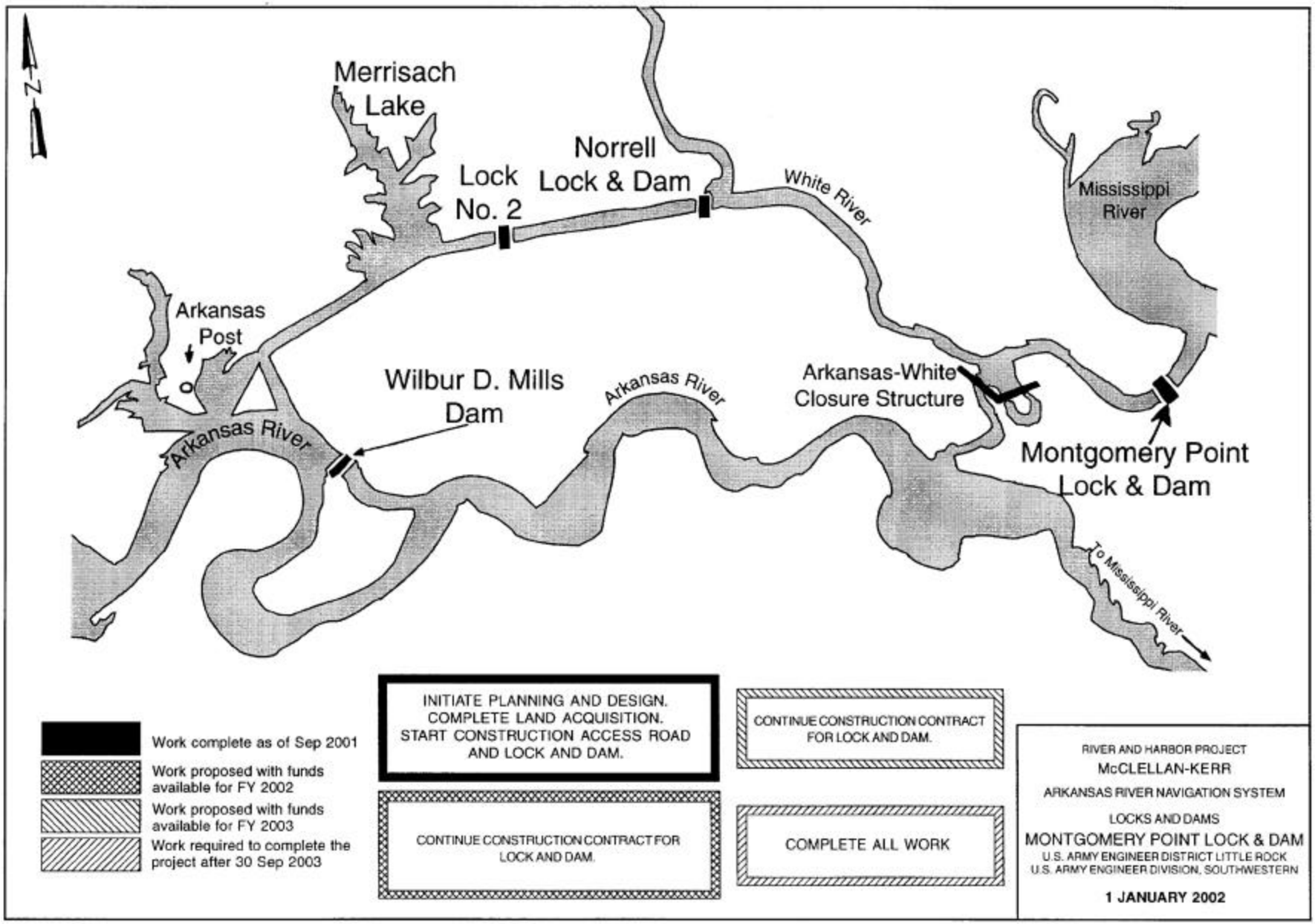
STATUS OF LOCAL COOPERATION: Congress has determined that the Inland Waterways Trust Fund will not be used. There are no other cost sharing or repayment requirements applicable to the project.

COMPARISON OF FEDERAL (CORPS OF ENGINEERS) COST ESTIMATES: The total project cost estimate of $262,000,000 is an increase of $20,000,000 from the latest estimate ($242,000,000) presented to Congress (FY 2002). The change in total estimate includes the following items.

Item	Amount
Additional equipment and facilities to maintain the lock and dam	$20,000,000
Total	$20,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The overall navigation system is essentially complete and in operation. The Final Operating and Maintenance Environmental Impact Statement for the McClellan-Kerr Arkansas River Navigation System in the Little Rock District was filed with the Council on Environmental Quality on 6 March 1975. The final Environmental Impact Statement for Tulsa District was filed with the Council on Environmental Quality on 28 July 1975. The final Environmental Impact Statement for the Montgomery Point Lock and Dam was filed with the Environmental Protection Agency on 28 June 1991.

OTHER INFORMATION: The McClellan-Kerr project was authorized by the River and Harbor Act of 1946 and it has been determined the Montgomery Point Lock and Dam was included in the authorization. The real estate estimate includes purchase of 703 acres that will be used to mitigate construction of the Montgomery Point Lock and Dam. Acquisition of land for the lock and dam was completed in FY 1996. The construction contract for the lock and dam was awarded in July 1997. As directed by Congress in the Energy and Water Development Appropriations Act of 2002, $18,824,000 is being used to expedite the construction on the lock and dam, although the completion date of the project has delayed from March 2006 to December 2008. This delay is due to adding the authorized modifications to the project, which includes additional equipment and facilities to maintain the lock and dam. The size of the gates and method of handling during future maintenance requires larger and different equipment than the equipment we now have to maintain the existing locks and dams on the system.



Division: Southwestern **District: Little Rock** **Project: Montgomery Point Lock and Dam, Arkansas**

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Arkansas City, Kansas (Continuing)

LOCATION: The project is located at the confluence of the Arkansas and Walnut Rivers in southern Kansas in Cowley County.

DESCRIPTION: The authorized plan, the National Economic Development Plan, consists of raising and extending the existing levee to provide standard project flood protection for the city. The lower end of the Walnut River Channel will be modified to a 350-foot bottom width with 3 to 1 side slopes for 1.9 miles and the C Street Canal will be modified to a 25 to 50-foot bottom width with 2 to 1 side slopes for 1.2 miles. The locally preferred plan (LPP) will combine most of the levee in the Walnut River floodplain with a highway by-pass embankment. The LPP will also extend the area of protection beyond that of the National Economic Development Plan.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 12.7 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 3.3 to 1 at 8 percent.

INITIAL BENEFIT-COST RATIO: 2.8 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest evaluation approved in June 1994, at 1994 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	$ 20,700,000		Entire Project	60	September 2004
Estimated Non-Federal Cost	6,900,000				
Cash Contribution	$1,900,000				
Other Costs	5,000,000				
Total Estimated Project Cost	$ 27,600,000				
Allocations to 30 September 2001	12,331,000				
Conference Allowance for FY 2002	5,100,000				
Allocation for FY 2002	4,260,000 1/				

PHYSICAL DATA

Grass and Stone Lined Channels: Length-1.9 miles
Bottom Width - 350 feet, Walnut River
- 25 to 50 feet, C Street Canal
Levees:
Length - 6 miles
Crest Width - 10 feet
Average Height - 21 feet

SUMMARIZED FINANCIAL DATA (Continued):

		ACCUM. PCT. OF EST. FED. COST
Allocations through FY 2002	$16,591,000	80
Allocation Requested for FY 2003	3,000,000	95
Programmed Balance to Complete	1,109,000	
Unprogrammed Balance to Complete after FY 2003	0	

1/ Reflects $815,000 reduction assigned as savings and slippage and $25,000 reprogrammed from the project.

JUSTIFICATION: The project will provide protection from periodic floods which have inundated the city numerous times in past years during periods of heavy spring and summer rains and storms. The maximum flood of record, that of 1923 with a 50 year frequency, would have caused an estimated $59 million in damages at October 1999 prices and conditions of development. Over $450 million in improvements would be severely impacted by events greater that 45-year on the Arkansas River and 75-year on the Walnut River. Average annual benefits are $7,980,000, all flood damage prevention, based on January 1994 price levels.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Construction	$ 2,553,000
Planning, Engineering & Design	187,000
Construction Management	260,000
Total	$ 3,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction	Annual Operation, Maintenance, Repair Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way and dredged material disposal areas.	$1,000,000	
Modify or relocate utilities, roads, bridges (except railroad bridges and other facilities, where necessary in the construction of the project.	1,000,000	
Section 215 credit for Walnut River levee north of Madison Avenue, which is incorporated into the highway bypass.	3,000,000	
Pay 7 percent of the costs allocated to flood control (to bring the total cost share to 25 percent) and bear all cost of operation, maintenance and replacement of flood control facilities.	1,900,000	$ 92,000
Total Non-Federal Costs	$6,900,000	$ 92,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

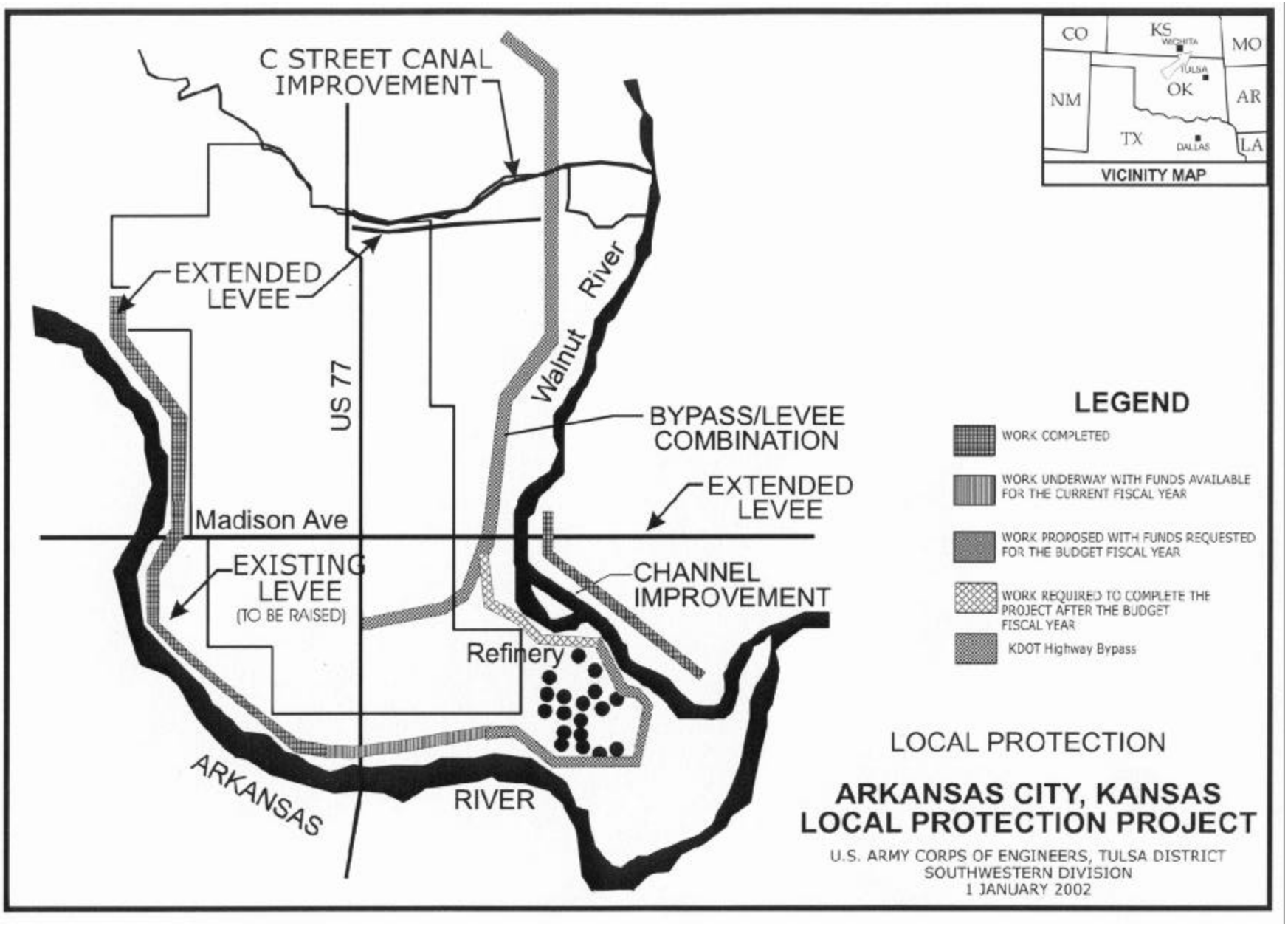
STATUS OF LOCAL COOPERATION: The city of Arkansas City indicated a willingness and capability by signing a resolution of assurance on 15 May 1994, and has since provided a letter of continued support for the project dated 28 December 1999. The Project Cooperation Agreement (PCA) was executed 4 September 1996.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $20,700,000 is an decrease of $150,000 from the latest estimate ($20,850,000) presented to Congress (FY 2002). The change includes the following items:

ITEM	AMOUNT
Price Escalation on Construction Features	(-)$150,000
Total	(-)$150,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency in April 1995.

OTHER INFORMATION: Funds to initiate preconstruction, engineering and design were appropriated in FY 1989. Funds to initiate construction were appropriated in FY 1996. Authorization of the project, as set forth in the Water Resources Development Act of 1986, provides that the project also includes the purchase, development, and management of 35 acres of land adjacent to the Kaw Wildlife Management Area. This action would replace the 35 acres of land lost due to the Walnut River channel improvements and development of a 3.3-acre wetland, with a 1.2-acre buffer zone, in borrow area D in the northwest part of the city to mitigate the loss of 2.3 acres of wetlands. The total estimated cost for mitigation at the project is $75,000 for acquisition of 35 acres of land and $700,000 to establish a combination of high value woody vegetation and nesting cover on lands secured for mitigation. Project completion advanced 1 year from September 2005 to September 2004 as a result of contractor progress on Phase II construction.


C STREET CANAL IMPROVEMENT
EXTENDED LEVEE
US 77
Walnut River
BYPASS/LEVEE COMBINATION
EXTENDED LEVEE
Madison Ave
EXISTING LEVEE
(TO BE RAISED)
CHANNEL IMPROVEMENT
Refinery
ARKANSAS RIVER
CO
KS
WICHITA
MO
TULSA
OK
NM
AR
TX
DALLAS
LA
VICINITY MAP
LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR
KDOT Highway Bypass
LOCAL PROTECTION
ARKANSAS CITY, KANSAS
LOCAL PROTECTION PROJECT
U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT
SOUTHWESTERN DIVISION
1 JANUARY 2002

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Brays Bayou, Houston, Texas (Continuing)

LOCATION: The project is located in the metropolitan area of Houston, in Harris County, Texas.

DESCRIPTION: The project provides for 3 miles of channel improvements, 3 flood detention basins, 7 miles of stream diversion, and recreation features including hike-and-bike trails, picnic facilities, sports fields, comfort stations and parking areas. As stated in the Water Resources Development Act of 1996, Section 211, subject to the approval of the Secretary of the Army, the non-Federal interest may design and construct an alternative to the diversion component.

AUTHORIZATION: Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 2.2 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 2.97 to 1 at 7 5/8 percent.

INITIAL BENEFIT-COST RATIO: 2.97 to 1 at 7 5/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest economic analysis included in the comprehensive Feasibility Report for Buffalo Bayou and Tributaries, dated July 1990 with October 1989 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST
Estimated Federal Cost		314,259,000	
Estimated Non-Federal Cost		165,021,000	
Cash Contributions	26,921,000		
Other Costs	138,100,000		
Total Estimated Project Cost		$ 479,280,000	
Allocations to 30 September 2001		13,751,000	
Conference Allowance for FY 2002		4,066,000	
Allocation for FY 2002		3,416,000 1/	
Allocations through FY 2002		17,167,000	5%
Allocation Requested for FY 2003		3,798,000	7%
Programmed Balance to Complete after FY 2003		293,294,000	
Unprogrammed Balance to Complete after FY 2003		0	

STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Detention Element	32.5%	September 2011
Diversion Element	0%	September 2014
Entire Project	17.3%	September 2014

PHYSICAL DATA

Channel:
(Detention Element)
Brays Bayou – 3.7 miles
Detention Basins- 3
(Diversion Element)

Stream Diversion – 7 miles, or an alternative to Diversion

Recreation facilities Hike-and-bike trails with picnic facilities, sports fields, and other day-use facilities.

1/ Reflects $650,000 assigned as savings and slippage.

JUSTIFICATION: Brays Bayou drains about 137 square miles in the south-central portion of the Buffalo Bayou watershed. The area is subject to rainstorms throughout the year and urban flooding is a common occurrence. About 53,400 homes and businesses are currently subject to flooding by the Standard Project Flood (SPF), and about 25,000 of these properties would be subject to flooding by a 100-year frequency flood. On an average annual basis, stream flooding could cause nearly $46,000,000 in damages per year to existing properties. The plan would reduce the existing 100-year frequency floodplain area by about 97 percent. Average annual flood damages would be reduced by about 95 percent. The recreational development will partially satisfy existing demand in the area. Average annual benefits, annualized at a 7-3/8% interest rate and based on October 1989 prices are as follows:

Annual Benefits	**Amount**
Flood Damage Prevention	87,268,400
Recreation	1,623,700
Total	88,892,100

FISCAL YEAR 2003: The total program amount of $3,798,000 will be applied as follows. Funds will be used to reimburse the Sponsor for completed discrete elements of the project in accord with Section 211(f) of Water Resources Development Act of 1996 and an executed Project Cooperation Agreement (PCA).

Partial reimbursement of sponsor for completed work (Discrete Segment #7 and #9)	$3,750,000
Galveston District Section 211 implementations costs (auditing, coordinating, review of E&D, constr. management)	48,000
Total	$3,798,000

NON-FEDERAL COST & REQUIREMENTS: Brays Bayou has been identified as a demonstration project by Section 211 of the Water Resources Development Act of 1996 (P.L. 104-303). A Project Cooperation Agreement is required between the Corps and the Harris County Flood Control District, the project's sponsor. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Detention Element		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	58,700,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	1,500,000	
Pay one-half of the separable costs allocated to recreation and bear all cost of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	2,726,000	300,000
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	10,223,000	247,480

Requirements of Local Cooperation (cont'd)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Diversion Element		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	40,240,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	37,660,000	
Pay one-half of the separable costs allocated to recreation and bear all cost of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	559,000	57,300
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	13,413,000	371,220
Total Non-Federal Costs	165,021,000	976,000

The non-Federal sponsors must also agree to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The sponsor for the flood control project is Harris County, acting through the Harris County Flood Control District. The PCA for the flood control portion of the Detention Element was executed on March 3, 2000. The current non-Federal cost estimate of $70,423,000 for this portion is an increase of $243,000 from the non-Federal cost estimate of $70,180,000 noted in the Project Cooperation Agreement (PCA). In accordance with Section 211 of the Water Resources Development Act of 1996, the sponsor is investigating the Diversion Element in an effort to find an alternative to the authorized project. A design agreement for this effort is currently being negotiated. There is currently no sponsor for the recreation features of the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $314,259,000 is an increase of $1,774,000 from the latest estimate ($312,485,000) presented to Congress (FY 2002). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$1,774,000
Total	$1,774,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Impact Statement was filed with the Environmental Protection Agency in September 1988. The Environmental Assessment (EA) for the Detention Element was completed on 3 April 1998 with the signing of the Finding of No Significant Impacts (FONSI).

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1990, and funds to initiate construction were appropriated in Fiscal Year 1998.

The Brays Bayou project is divided into two separable elements, a detention and a diversion element. The detention element has undergone design, and construction was initiated in FY 98. The diversion element is not supported by the Sponsor or the homeowners in the area, so an alternative must be identified to provide a level of protection to this portion of the Houston area. The Harris County Flood Control District (HCFCD), the local sponsor, is currently conducting reformulation studies, and will propose an alternative to the diversion element.

The project was included in the Water Resources Development Act of 1996 (Section 211(f)(6)) as a demonstration project to show advantages and effectiveness of non-Federal interests to undertake planning, design, and construction of Federal Flood Control projects. The HCFCD will receive reimbursement upon completion and approval of discrete segments of the authorized project. Each discrete segment's work will be audited prior to reimbursement. Funds being appropriated will be used to reimburse the sponsor and to pay Corps oversight costs.

Detention Separable Element

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		136,753,000
Estimated Non-Federal Cost		73,708,000
Cash Contributions	13,508,000	
Other Costs	60,200,000	

REMAINING BENEFIT-REMAINING COST RATIO: 2.2 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 4.3 to 1 at 7 5/8 percent.

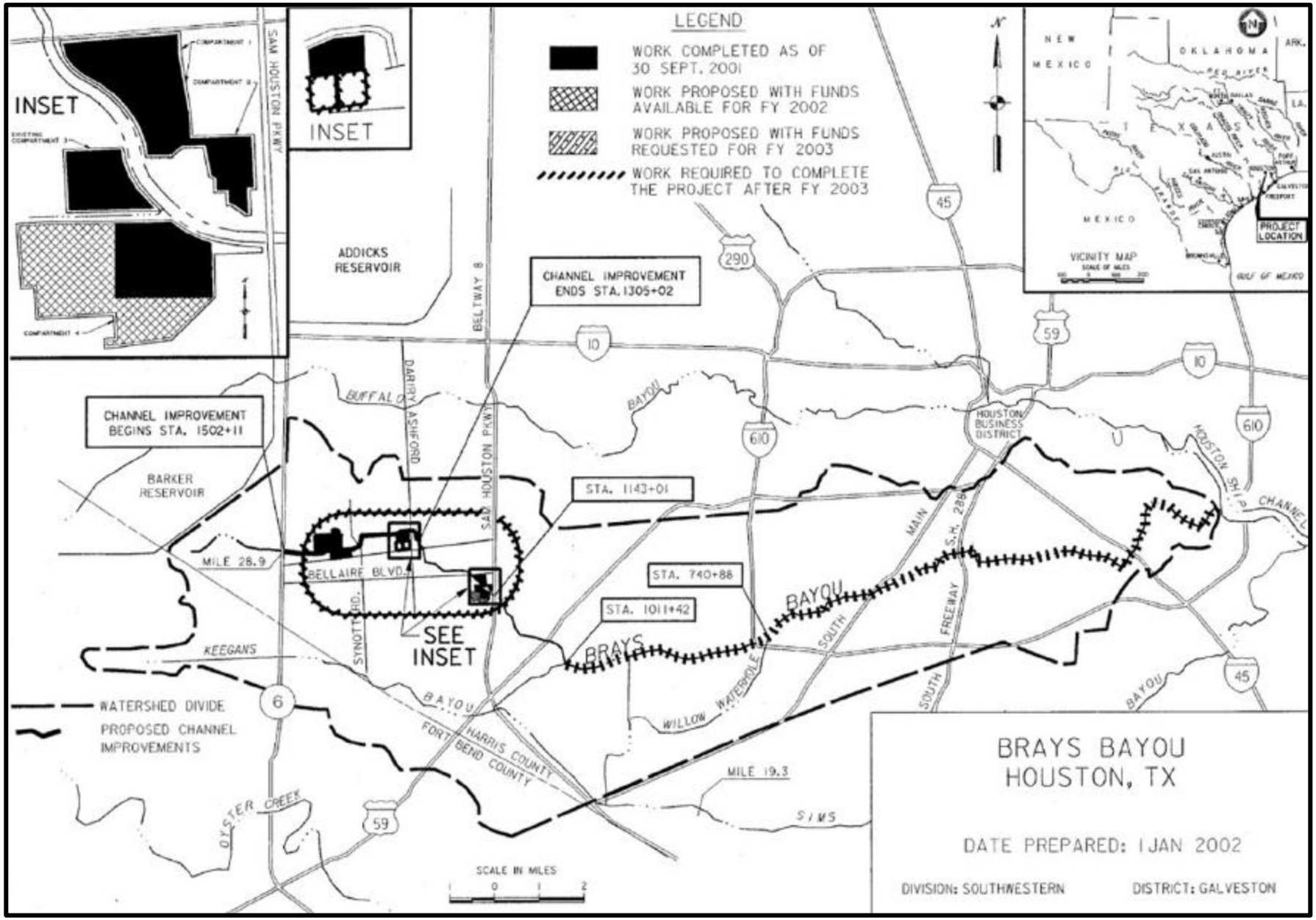
Diversion Separable Element

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		177,506,000
Estimated Non-Federal Cost		91,313,000
Cash Contributions	13,413,000	
Other Costs	77,900,000	

REMAINING BENEFIT-REMAINING COST RATIO: 2.4 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 2.4 to 1 at 7 5/8 percent.


LEGEND
WORK COMPLETED AS OF 30 SEPT. 2001
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2002
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2003
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2003
INSET
INSET
SAM HOUSTON PKWY.
ADDICKS RESERVOIR
BELTWAY 8
CHANNEL IMPROVEMENT ENDS STA. 1305+02
CHANNEL IMPROVEMENT BEGINS STA. 1502+11
BARKER RESERVOIR
BUFFALO BAYOU
DAIRY ASHFORD
STA. 1143+01
MILE 28.9
BELLAIRE BLVD.
SAM HOUSTON PKWY.
SEE INSET
STA. 740+88
STA. 1011+42
BRAYS BAYOU
KEEGANS
SYNOTT RD.
WILLOW WATERHOLE
MAIN
S.H. 288
SOUTH FREEWAY
HOUSTON BUSINESS DISTRICT
HOUSTON SHIP CHANNEL
WATERSHED DIVIDE
PROPOSED CHANNEL IMPROVEMENTS
HARRIS COUNTY
FORT BEND COUNTY
OYSTER CREEK
MILE 19.3
SIMS
SCALE IN MILES
0 1 2
NEW MEXICO
OKLAHOMA
ARK.
LA.
MEXICO
PROJECT LOCATION
VICINITY MAP
GULF OF MEXICO
BRAYS BAYOU
HOUSTON, TX
DATE PREPARED: 1 JAN 2002
DIVISION: SOUTHWESTERN
DISTRICT: GALVESTON

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Clear Creek, TX (Continuing)

LOCATION: The authorized project is located about midway between the two metropolitan centers of Houston, Texas, on the north and Galveston-Texas City on the south in Harris and Galveston Counties.

DESCRIPTION: The project provides for channel enlargement and easing of bends within the existing stream from Mile 3.8 to Mile 19.1, a second outlet with gated structure from Clear Lake to Galveston Bay, and replacements of riparian woodlands, brush, and wetlands to mitigate environmental effects.

AUTHORIZATION: Flood Control Act of 1968.

REMAINING BENEFIT-REMAINING COST RATIO: 2.2 to 1 at 3 1/4 percent.

TOTAL BENEFIT-COST RATIO: 2.1 to 1 at 3 1/4 percent

INITIAL BENEFIT-COST RATIO: 3.1 to 1 at 3 1/4 percent (FY 1985).

BASIS OF BENEFIT-COST RATIO: Benefits and costs are based on evaluation made in General Design Memorandum, approved October 1982, and updated by Design Memorandum 2 approved 3 September 1986, with October 1986 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (CofE)		93,033,000		Entire Project	49	September 2010
Estimated Non-Federal Cost		56,707,000				
Cash Contributions	7,487,000					
Other Costs	49,220,000					
Total Estimated Project Cost		149,740,000				

Allocations to 30 September 2001	24,154,000	
Conference Allowance for FY 2002	1,200,000	
Allocation for FY 2002	1,008,000 1/	
Allocations through FY 2002	25,162,000	27%
Allocation Requested for FY 2003	1,200,000	28%
Programmed Balance to Complete after FY 2003	66,671,000	
Unprogrammed Balance to Complete after FY 2003	0	

PHYSICAL DATA

Channels: 15.3 miles above Clear Lake
Second Outlet: Gated outlet structure and channel from Clear Lake to Galveston Bay
Relocations:
Railroads: Alterations to three bridges ($3,124,000)

1/ Reflects $192,000 reduction assigned as savings and slippage.

JUSTIFICATION: The authorized project will provide flood protection for a rapidly developing residential and commercial area, a suburb of Houston. Value of land and improvements that will be protected from the design flood is estimated at $530,000,000 based on 1990 price levels. Flooding in June 1976 caused minor damages; however, development in the area has continued and more runoff and damages would occur under current conditions. In July 1979, major flooding occurred and approximately $52,300,000 in damages were experienced based on October 1996 price levels. The average annual benefits are $8,128,600, all flood control included in Design Memorandum 2, approved 3 September 1986, based on 1 October 1986 price levels.

FISCAL YEAR 2003: The requested amount of $1,200,000 will be applied as follows:

Continue General Reevaluation Studies	$1,200,000
Total	$1,200,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsors must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way and borrow and excavated or dredged material placement areas.	22,600,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	26,620,000	
Pay 5 percent of the separable costs allocated for mitigation measures.	336,000	
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	7,151,000	430,000
Total Non-Federal Costs	56,707,000	430,000

The non-Federal sponsors have also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The sponsors are Galveston and Harris Counties. On 30 June 1986, the sponsors entered into a Local Cooperation Agreement to provide the necessary local cooperation. By letter of June 9, 1999, Brazoria County Drainage District No. 4 indicated its intent to be a project sponsor again beginning with participation in the General Reevaluation Report.

The current non-Federal cost estimate of $56,707,000, which includes a cash contribution of $7,487,000, is an increase of $22,918,000 over the non-Federal cost estimate of $33,789,000 in the Local Cooperation Agreement, which included a cash contribution of $4,789,000. Analysis of the non-Federal sponsors' financial capability to participate in the project affirms that the sponsors have a reasonable and implementable plan for meeting their financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $93,033,000 is a decrease of $1,082,000 from the latest estimate ($94,115,000) presented to Congress (FY 2002). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$ (-)1,082,000
Total	$ (-)1,082,000

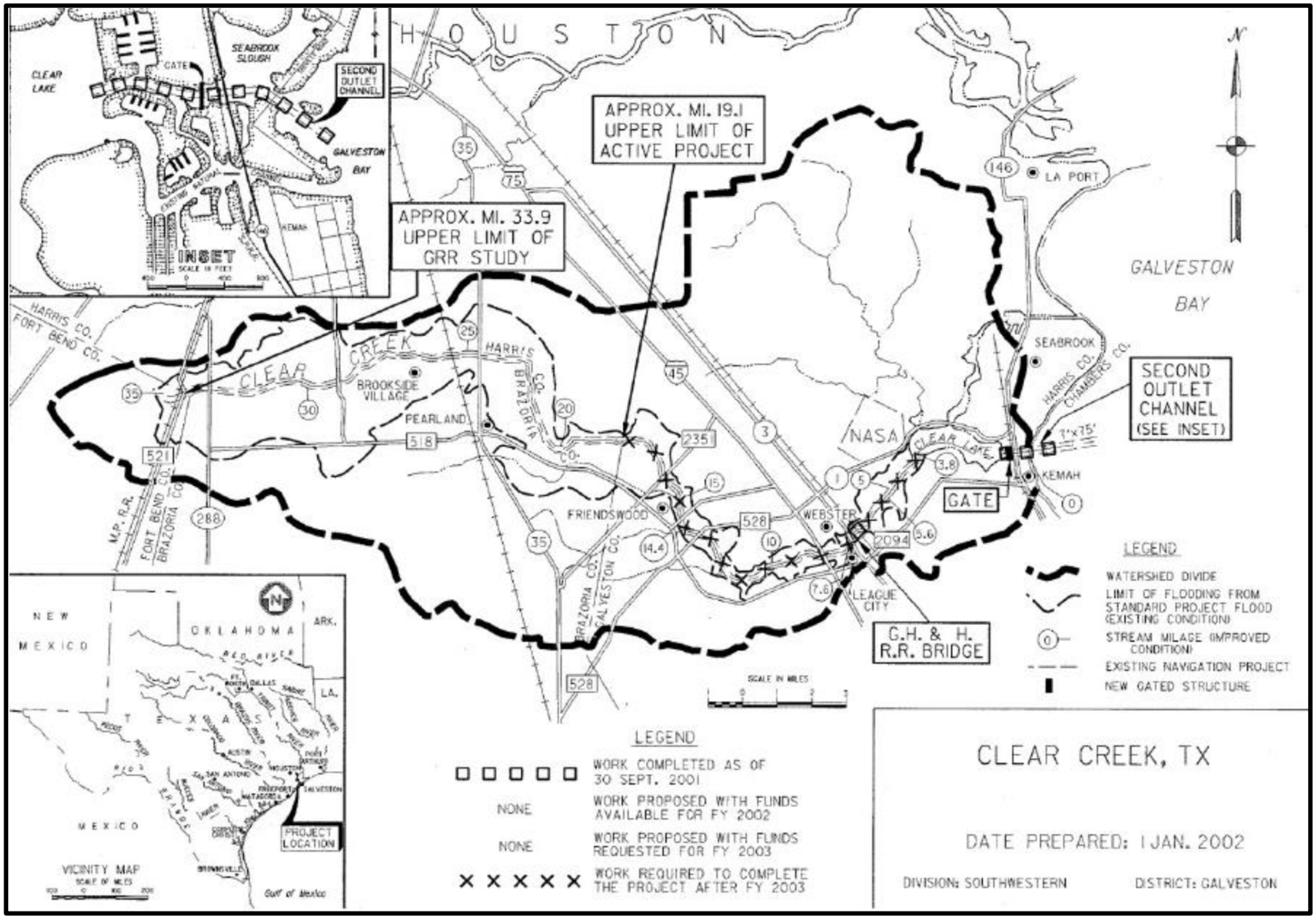
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency August 1982.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1972. Funds to initiate construction were appropriated by the Fiscal Year 1985 Supplemental Appropriations Act.

By letter 20 February 1986, Brazoria County Drainage District No. 4 (BCDD #4) requested that the portion of the project lying upstream of the Brazoria-Galveston County line, river mile 19.1, be placed in the "inactive" category. Reclassification was approved 27 May 1986. By letter of June 9, 1999, BCDD #4 indicated its intent to be a project sponsor again beginning with participation in the General Reevaluation Report.

The total cost of fish and wildlife mitigation is estimated to be $6,730,000 (Federal $6,394,000 and non-Federal $336,000).

Public opposition to the authorized project upstream of Clear Lake, as currently designed, prompted the local sponsors to review the public’s concerns about the project in order to develop a publicly acceptable alternative within the scope of the current Federal authorization. Generally, opposition to the authorized project has focused on environmental concerns in the upper reaches and on induced flooding concerns downstream in Clear Lake. Studies were initiated in Fiscal Year 1998 to determine the Corps approval authority for the sponsor-proposed alternative and how the alternative could be documented for approval. These studies led to the recommendation that a General Reevaluation Report be prepared to consider reevaluation of the authorized project and formulation of the sponsor-proposed alternative or any other alternatives(including buyout or other non-structural alternatives), that the sponsors and the Corps deem reasonable to pursue. The General Reevaluation Report studies were initiated in June 1999 and are estimated to take about five years to complete.


HOUSTON
APPROX. MI. 19.1
UPPER LIMIT OF
ACTIVE PROJECT
APPROX. MI. 33.9
UPPER LIMIT OF
GRR STUDY
SECOND
OUTLET
CHANNEL
(SEE INSET)
GATE
G.H. & H.
R.R. BRIDGE
CLEAR LAKE
SEABROOK SLOUGH
GALVESTON BAY
CLEAR CREEK
BROOKSIDE VILLAGE
PEARLAND
FRIENDSWOOD
WEBSTER
LEAGUE CITY
SEABROOK
LA PORT
KEMAH
NASA
HARRIS CO.
FORT BEND CO.
BRAZORIA CO.
CHAMBERS CO.
GALVESTON CO.
M.P. R.R.
INSET
SCALE IN FEET
SCALE IN MILES
LEGEND
WATERSHED DIVIDE
LIMIT OF FLOODING FROM STANDARD PROJECT FLOOD (EXISTING CONDITION)
STREAM MILAGE (IMPROVED CONDITION)
EXISTING NAVIGATION PROJECT
NEW GATED STRUCTURE
NEW MEXICO
OKLAHOMA
ARK.
LA.
TEXAS
MEXICO
Gulf of Mexico
PROJECT LOCATION
VICINITY MAP
LEGEND
WORK COMPLETED AS OF 30 SEPT. 2001
NONE
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2002
NONE
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2003
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2003
CLEAR CREEK, TX
DATE PREPARED: 1 JAN. 2002
DIVISION: SOUTHWESTERN
DISTRICT: GALVESTON

APPROPRIATION TITLE: Construction, General – Local Protection (Flood Control)

PROJECT: Johnson Creek, Upper Trinity River Basin, Arlington, TX (Continuing)

LOCATION: Arlington, Texas

DESCRIPTION: The Johnson Creek project includes a buy-out of 140 structures for flood damage reduction, 155 acres of ecosystem restoration, and 2.25 miles of linear recreation features. The buy-out would prevent damages during a 25-year flood event.

AUTHORIZATION: Water Resources Development Act of 1999, Section 101(b)(14).

REMAINING BENEFIT-REMAINING COST RATIO: 3.6 to 1 at 6-3/8 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 6-7/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in the Interim Feasibility Report dated March 1999.

SUMMARIZED FINANCIAL DATA		ACCUM PCT. OF EST. FED. COST	STATUS (1 JAN 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	$14,430,000	0	Entire Project	42	September 2003
Estimated Non-Federal Cost	8,390,000				
Cash Contributions	1,845,000				
LERRDs	19,445,000				
Reimbursable	(12,900,000)				
Total Estimated Project Cost	$22,820,000				

PHYSICAL DATA

Buy-out of 140 structures
Restoration of 155 acres
2.25 miles of linear recreation

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM PCT. OF EST. FED COST	
Allocations to 30 September 2001	$ 6,173,000	0	
Conference Allowance for FY 2002	5,500,000	0	
Allocation for FY 2002	$ 4,621,000 1/	0	1/Reflects $879,000 reduction assigned
Allocations through FY 2002	10,794,000	75	as savings & slippage.
Allocation Requested for FY 2003	3,636,000	100	
Programmed Balance to Complete after FY 2003	$ 0	0	
Unprogrammed Balance to Complete after FY 2003	0	0	

JUSTIFICATION: The Johnson Creek watershed, which has a drainage area of 21 square miles, lies principally in Tarrant County with a small portion lying in Dallas County. Much of the watershed is extensively developed, being used for industrial, residential, commercial, and recreational activities. The Six Flags Over Texas Amusement Park, the Ballpark at Arlington, and the Arlington Convention Center are all located along the banks of Johnson Creek. A total of 556 structures, with an estimated total value of $66.6 million, were identified within the Standard Project Flood limits of Johnson Creek. Historically, numerous flood events have occurred along Johnson Creek. The flood of record occurred on 16-17 May 1989, which damaged 175 structures and overtopped the eight major bridges by as much as five feet. The flood of 26-27 March 1977 inundated about 70 homes, and one person drowned. The average annual benefits are $1,910,000 based on October 1998 price levels.

Annual Benefits	Amount
Flood Damage Reduction	$ 791,000
Recreation	1,119,000
Total	$1,910,000

Ecosystem Restoration – 117 Average Annual Habitat Units

FISCAL YEAR 2003: The requested amount will be applied as follows:

Complete Real Estate Acquisition - local sponsor reimbursement	$ 2,236,000
Construction Management	400,000
Construction - Demolition	1,000,000
Total	$ 3,636,000

Division: Southwestern **District: Fort Worth** **Project: Johnson Creek, Arlington, Texas**
Upper Trinity River Basin

NON-FEDERAL COST: In accordance with the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation and Replacement Costs
Provide lands; easements; rights-of-way; relocation payments and assistance to displaced persons; disposal areas for borrow and excavated or dredged material; and modify or relocate utilities roads, bridges and other facilities, where necessary for the construction of the project.	$7,490,000	0
Pay 35 percent of Flood Damage Reduction	0	$ 32,700
Pay 35 percent of Ecosystem Restoration	0	17,600
Pay one-half of the separable costs allocated to recreation plus 100 percent of recreation costs above Federal limit.	900,000	55,000
Total Non-Federal Costs	$ 8,390,000	$ 105,300

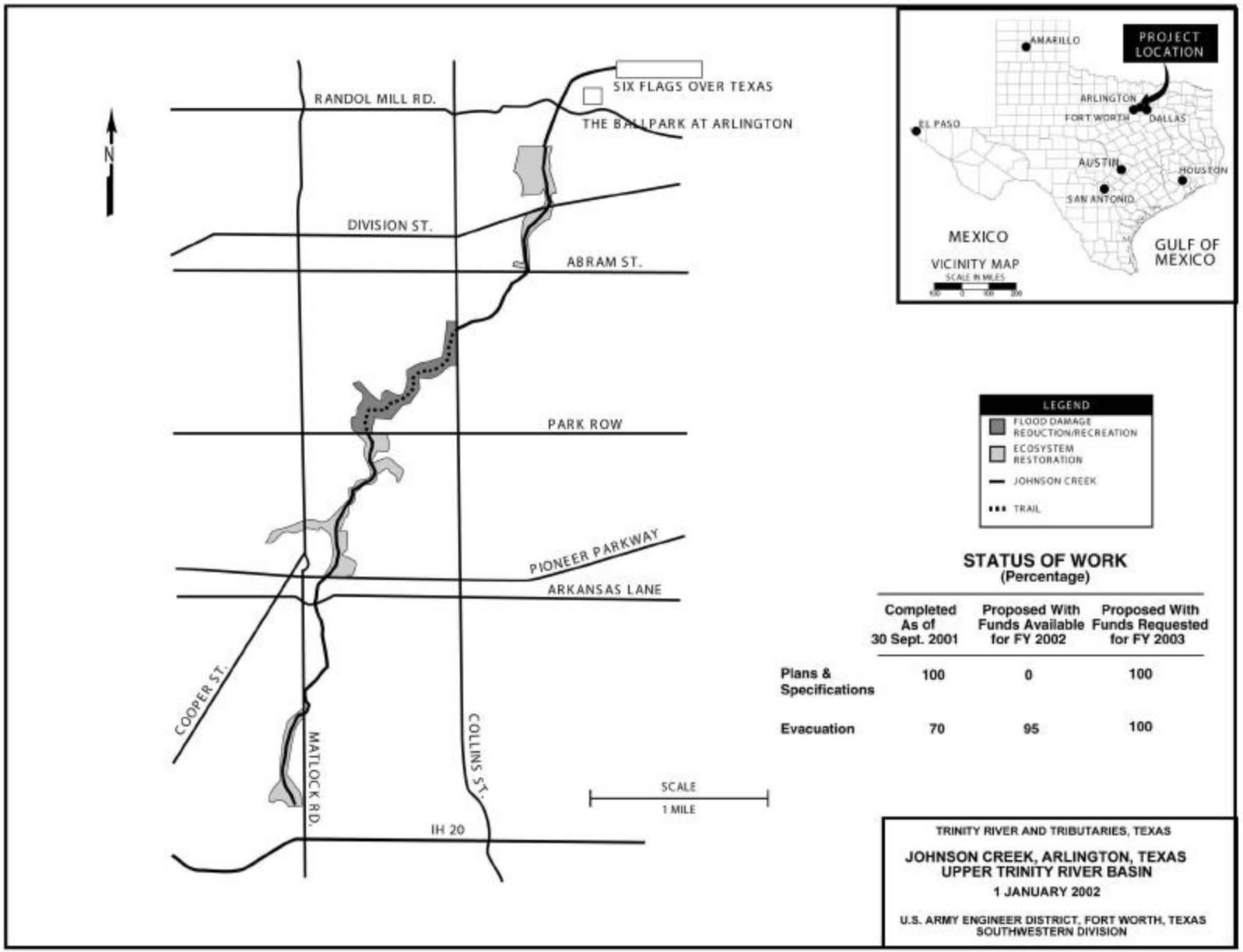
The non-Federal sponsor will make all required payments concurrently with project construction. The non-Federal sponsor will also bear all costs of operation, maintenance, repair, rehabilitation and replacement of project features.

STATUS OF LOCAL COOPERATION: The city of Arlington, Texas, signed the Project Cooperation Agreement on 1 December 2000. The city of Arlington will fund the non-Federal portion of this project with the sale of bonds and certificates of obligation by the city of Arlington. The city, through approval of a Section 104 agreement, has already expended $7,000,000 on the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $14,430,000 is an increase of $800,000 over the latest estimate of $13,630,000 submitted to Congress in Fiscal Year 2002. This increase is due to changes in actual costs of acquisition and demolition.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Finding of No Significant Impact was prepared as part of the Environmental Assessment and was signed on 4 September 1998. Fish and wildlife mitigation is not required for this non-structural project.

OTHER INFORMATION: The Assistant Secretary of the Army, Civil Works, approved a Section 104, Public Law 99-662, General Credit for Flood Control, on 5 February 1997. Funds to initiate construction were appropriated in Fiscal Year 2000. The scheduled completion date of September 2003 for programmed work is an acceleration from the latest completion date of September 2004 presented to Congress. This change is due to accelerated real estate acquisition.



Division: Southwestern **District: Fort Worth** **Project: Johnson Creek, Arlington, Texas**
Upper Trinity River Basin

APPROPRIATION TITLE: Construction, General – Local Protection (Flood Control)

PROJECT: San Antonio Channel Improvement, Texas (Continuing)

LOCATION: The project is located in the city of San Antonio, Bexar County, Texas.

DESCRIPTION: The project includes local protection features including channels, levees and two diversion tunnels, and recreation and environmental restoration.

AUTHORIZATION: Flood Control Act of 1954; Water Resources Development Act of 1976, Section 103; Water Resources Development Act of 1996, Section 224; Water Resources Development Act of 2000, Section 335.

REMAINING BENEFIT-REMAINING COST RATIO: 1.2 to 1 at 6-3/8 percent.

TOTAL BENEFIT-COST RATIO: 3.9 to 1 at 6-3/8 percent.

INITIAL BENEFIT-COST RATIO: 2.6 to 1 at 2-1/2 percent, Fiscal Year 1957.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in May 1987 at updated to 2001 price levels.

SUMMARIZED FINANCIAL DATA		**ACCUM. PCT. OF EST. FED. COST**	**STATUS (1 Jan 2002)**	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Estimated Federal Cost	$158,000,000		Entire Project	98	September 2003
Estimated Non-Federal Cost	67,000,000				
Cash Contributions	$ 4,210,000				
Preconstruction, Engineering and Design	1,040,000				
Other Costs	61,750,000				
Total Estimated Project Cost	$225,000,000				

PHYSICAL DATA

Channels: 30.7 miles
Concrete drop structure: one
Relocations:
  Railroad: alteration to 11 bridges
Tunnels:
  San Pedro Creek, 6,040 feet in length
  San Antonio River, 16,360 feet in length

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM. PCT. OF EST. FED. COST	
Allocations to 30 September 2001	$153,941,000		
Conference Allowance for FY 2002	1,000,000		
Allocation for FY 2002	840,000 1/		1/ Reflects $160,000 reduction
Allocations through FY 2002	154,781,000	98	assigned as savings and
Allocation Requested for FY 2003	3,219,000	100	slippage.
Programmed Balance to Complete after FY 2003	0	0	
Unprogrammed Balance to Complete after FY 2003	0	0	

JUSTIFICATION: The improvements provide a high degree of protection to the metropolitan area of San Antonio which has been subject to disastrous floods and heavy loss of life in the past. Approximately 3,085 acres of urban lands are subject to flooding in San Antonio. Value of land and improvements to be protected from the design flood is estimated at $1,136,553,000 based on 2001 price levels. The maximum flood of record occurred in September 1921 causing $949,000 in damages and affected areas totaling 2,900 acres. A recurrence of this flood under current conditions and October 2001 price levels would result in damages estimated at $76,675,900 of which $75,050,300 would be prevented with the project in full operation. In August 1992 the completed portions of the project prevented an additional $11,300,000 in damages. On 17 October 1998 almost 10 inches of rain fell in 17 hours at the San Antonio International Airport, breaking the city's one-day rainfall record of 6.8 inches set in 1921. Little damage was experienced within the project areas while 11 deaths and $115 million in damages occurred elsewhere in the city. The estimated average annual benefits, based on October 2001 price levels, are as follows:

Annual Benefits	Amount
Flood Damage Reduction	$ 18,321,900
Land Enhancement	1,245,000
Total	$ 19,566,900

FISCAL YEAR 2003: The requested amount will be applied as follows:

Complete General Reevaluation Report	$ 500,000
Complete construction of Unit 8-5-2	1,369,000
Complete flood damage repairs	1,150,000
Complete flood plain mapping	200,000
Total	$ 3,219,000

NON-FEDERAL COST: In accordance with the authorizing act, Flood Control Act of 1954, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	**Payments During Construction and Reimbursements**	**Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs**
Provide lands; easements; rights-of-way; relocation payments and assistance to displaced persons; disposal areas for borrow and excavated or dredged material; and modify or relocate utilities, roads, bridges and other facilities, where necessary for the construction of the project.	$ 16,541,000	
Modify and relocate/reconstruct channel dams, bridges and utilities.	33,217,000	
Channel rectification.	11,992,000	
Pay 2.65 percent of Federal construction costs, based on land enhancement benefits, and bear all costs of operation, maintenance and replacement of flood control facilities.	4,210,000	$ 1,250,000
Pay 50 percent of a General Reevaluation Report to investigate the feasibility of incorporating environmental restoration and recreation improvements into the project.	1,040,000	
Total Non-Federal Costs	$ 67,000,000	$ 1,250,000

Requirements of Local Cooperation (Continued)

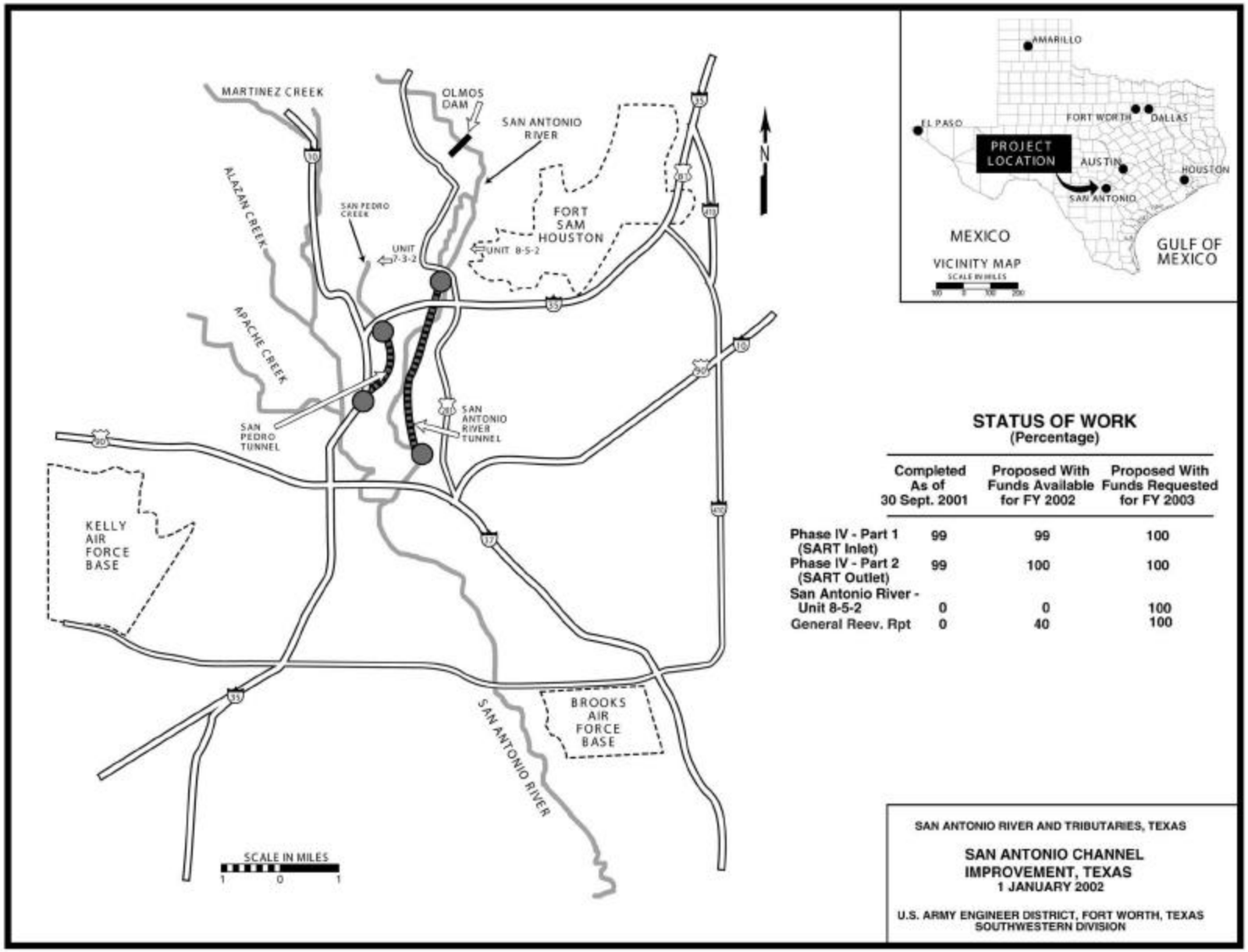
The non-Federal Sponsor has also agreed to make all required payments concurrently with project construction. The non-Federal sponsor will also bear all costs of operation, maintenance, repair, rehabilitation and replacement of project features. An agreement has been negotiated with the sponsor to cost-share a General Reevaluation Report.

STATUS OF LOCAL COOPERATION: The San Antonio River Authority, a State agency, by a resolution passed on 28 February 1956, agreed to comply with all the requirements of local cooperation. This was supplemented by an agreement dated 14 January 1972, which addressed the authorizing requirements of Public Law 91-646. Under a contract of 12 September 1955, the Authority was authorized to expend $12,000,000 on capital improvements; however, due to continuous increase in cost of construction and relocations, added channel improvement below Bergs Mill, increased land values, and local interest costs required by the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, and the addition of a General Reevaluation Report for environmental restoration and recreation, it is estimated that $66,700,000 will now be required. The Water Resources Development Act of 2000, Section 433, added environmental restoration and recreation as project purposes. Cash contributions in the amount of $3,958,000 have been received from the Authority through September 2001 in compliance with requirements of the Flood Control Act of 1954. Rights-of-way have been furnished as required for construction performed to date. Relocations for Unit 8-5-2 remain to be completed prior to construction in FY 2002. Thus far, local interests have expended approximately $65,649,000 for lands, required modifications of utilities and bridges, channel modification, relocation/reconstruction of channel dams, payments required for relocation assistance, and required cash contributions. A cost-sharing agreement for the General Reevaluation Report was transmitted to the sponsor in September 2001 for execution.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $158,000,000 is an increase of $2,700,000 over the latest estimate of $155,300,000 submitted to Congress in FY 2002. This increase is due to price levels, inflation, actual contract awards, additional flood damage repair, and adjustments to the estimate cost of the General Reevaluation Report.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 9 November 1971. The final Supplemental Environmental Impact Statement for Unit 8-3-2 was filed with the Environmental Protection Agency on 13 February 1981. An Environmental Assessment for the tunnels on Units 8-4, 8-5-1, and 7-3-1 resulted in a Finding of No Significant Impact which was signed by the District Engineer 20 May 1986. The Environmental Assessment was supplemented to reflect the addition of some channelization at the San Antonio River Tunnel Outlet and resulted in a Finding of No Significant Impact, which was signed on 13 April 1995. Also, an Environmental Assessment for San Pedro Creek Unit 7-3-2 resulting in a Finding of No Significant Impact was signed by the District Engineer on 13 August 1993. Following plan formulation, an Environmental Assessment will be performed in Fiscal Year 2003 for the proposed improvements on Unit 8-5-2. During the General Reevaluation Report, an Environmental Assessment will also be conducted if further improvements are recommended.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1956 and for construction in Fiscal Year 1957. The scheduled completion date of September 2003 for programmed work is an acceleration from the latest completion date of September 2004 presented to Congress. This change is due to reduction in scope of the remaining project effort.



Division: Southwestern **District: Fort Worth** **Project: San Antonio Channel Improvement, Texas**

APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Sims Bayou, Houston, TX (Continuing)

LOCATION: The project is located in Harris County, in the southern portion of Houston, Texas.

DESCRIPTION: The project provides flood damage reduction and consists of 19.3 miles of channel enlargement, rectification, and erosion control measures. Environmental quality measures, riparian habitat improvements, and recreational features are also included in the project.

AUTHORIZATION: Water Resources Development Act (WRDA) of 1986, Energy and Water Development Appropriations Act of 1990, and WRDA of 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 9.2 to 1 at 8 5/8 percent.

TOTAL BENEFIT-COST RATIO: 6.8 to 1 at 8 5/8 percent.

INITIAL BENEFIT-COST RATIO: 9.3 to 1 at 8 5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from Supplement 1 to the General Design Memorandum dated May 1993 at October 1992 price levels. Costs are based on the GDM Supplement 1 at October 1992 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		229,165,000		Entire Project	45	September 2009
Estimated Non-Federal Cost		111,146,000				
Cash Contribution	20,066,000					
Other Costs	91,080,000					
Total Estimated Project Cost		340,311,000				
Allocations to 30 September 2001		98,308,000				
Conference Allowance for FY 2002		9,000,000				
Allocation for FY 2002		7,562,000	1/			
Allocations through FY 2002		105,870,000	46%			
Allocation Requested for FY 2003		9,000,000	50%			
Programmed Balance to Complete after FY 2003		114,295,000				
Unprogrammed Balance to Complete after FY 2003		0				

PHYSICAL DATA

Channels:
Sims Bayou - 19.3 miles
Relocations:
Railroad bridges
Utilities
Roads
Recreation facilities:
Hike-and-bike trails with picnic and other day-use facilities

1/ Reflects $1,438,000 reduction assigned as savings and slippage.

JUSTIFICATION: The project will eliminate stream flooding from 14,800 acres of urban lands and beneficially affect nearly 78,000 persons living in 29,000 homes. The 100-year flood plain would be reduced to 2,300 acres outside the required rights-of-way. The recreational development will partially satisfy existing demand in the area. Average annual benefits, annualized at an 8-5/8% interest rate and based on October 1992 prices are as follows:

Annual Benefits	Amount
Flood Damage Prevention	219,344,700
Recreation	945,300
Total	220,290,000

FISCAL YEAR 2003: The requested amount of $9,000,000 will be applied as follows:

Continue construction	$7,000,000
Reimbursement to Project Sponsor	300,000
Planning, Engineering, and Design	900,000
Construction Management	800,000
Total	$9,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	**Payments During Construction and Reimbursements**	**Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs**
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	40,010,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	50,760,000	
Pay one-half of the separable costs allocated to recreation and bear all cost of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	3,390,000	139,000
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	16,676,000	331,000
Credit for future preparation of the dredged material disposal area for the Mouth to PTRR reach and completed miscellaneous engineering and design activities.	310,000	
Total Non-Federal Costs	111,146,000	470,000

The non-Federal sponsors must also agree to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The sponsor for the flood control project is Harris County. The current non-Federal cost estimate of $111,146,000 for flood control, which includes a cash contribution of $20,066,000, is an increase of $24,546,000 from the non-Federal cost estimate of $86,600,000 noted in the Local Cooperation Agreement (LCA), which reflected a cash contribution of $13,800,000. In a letter dated 19 September 1991, the non-Federal sponsor indicated that it is financially capable and willing to contribute the increased non-Federal share. Analysis (dated 31 October 1991) of the non-Federal sponsor's financial capability to participate in the project reaffirms that the sponsor has a reasonable and implementable plan for meeting their financial commitment as expressed in the LCA. In 1993, the City of Houston indicated its desire to sponsor the recreation features for the project. In April 1999 the City provided a letter indicating its renewed interest in sponsorship. Coordination has been initiated for a Limited Reevaluation Report and the Project Cooperation Agreement for the recreation features.

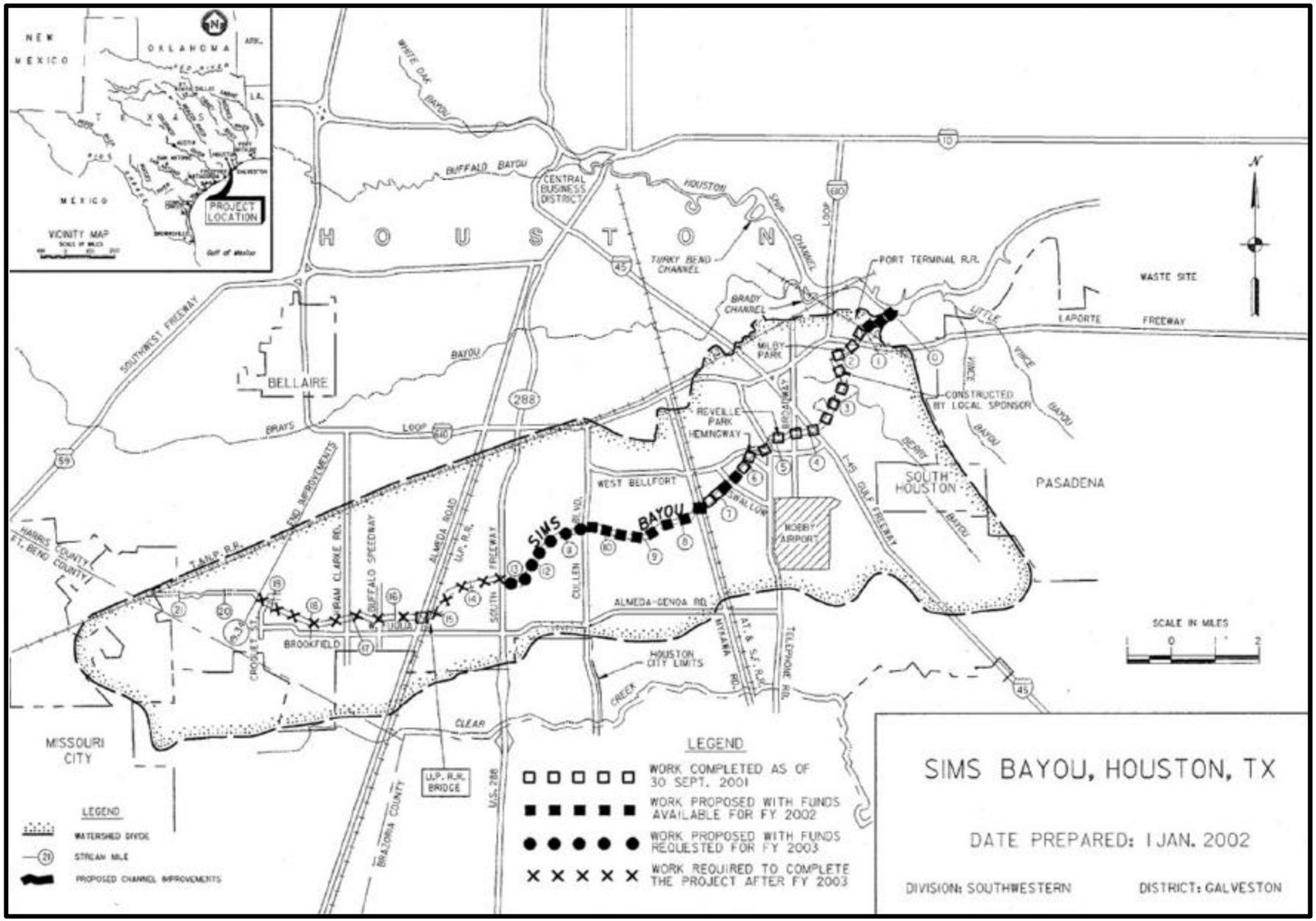
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $229,165,000 is an increase of $3,413,000 from the latest estimate ($225,752,000) presented to Congress (FY 2002). This change includes the following items.

Item	Amount
Post Contract Award and Other Estimating Adjustments	(+) $1,311,000
Price Escalation on Construction Features	(+) 2,102,000
Total	(+) $3,413,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency in September 1983.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1986 and funds to initiate construction were appropriated in Fiscal Year 1990.

The Assistant Secretary of the Army for Civil Works has approved the sponsor's request for credit for work performed by the local sponsor. This credit is currently estimated at $20,070,000, exclusive of lands and is being reimbursed during the period of construction. The project authorization was amended by the Energy and Water Development Appropriations Act of 1990 as the project cost estimate exceeded the maximum cost growth as described in Section 902 of the Water Resources Development Act of 1986. The authorization has been further modified by WRDA '92, Section 102 (66), to include, to the extent practicable, measures to improve environmental quality and riparian habitat.


NEW MEXICO
OKLAHOMA
TEXAS
MEXICO
PROJECT LOCATION
VICINITY MAP
Gulf of Mexico
HOUSTON
WHITE OAK BAYOU
BUFFALO BAYOU
CENTRAL BUSINESS DISTRICT
HOUSTON SHIP CHANNEL
TURKEY BEND CHANNEL
PORT TERMINAL R.R.
BRADY CHANNEL
WASTE SITE
LAPORTE FREEWAY
MILBY PARK
CONSTRUCTED BY LOCAL SPONSOR
SOUTHWEST FREEWAY
BELLAIRE
BRAYS BAYOU
LOOP 610
REVEILLE PARK HEMINGWAY
BROADWAY
WEST BELLFORT
SOUTH HOUSTON
PASADENA
HOBBY AIRPORT
I-45 GULF FREEWAY
SIMS BAYOU
HARRIS COUNTY FT. BEND COUNTY
T.&N.O. R.R.
MIRAM CLARK RD.
BUFFALO SPEEDWAY
ALMEDA ROAD
U.P. R.R.
SOUTH FREEWAY
CULLEN BLVD.
ALMEDA-GENOA RD.
BROOKFIELD
HOUSTON CITY LIMITS
A.T. & S.F. R.R.
TELEPHONE RD.
CLEAR CREEK
MISSOURI CITY
U.P. R.R. BRIDGE
BRAZORIA COUNTY
U.S. 288
SCALE IN MILES
LEGEND
WATERSHED DIVIDE
STREAM MILE
PROPOSED CHANNEL IMPROVEMENTS
LEGEND
WORK COMPLETED AS OF 30 SEPT. 2001
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2002
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2003
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2003
SIMS BAYOU, HOUSTON, TX
DATE PREPARED: 1 JAN. 2002
DIVISION: SOUTHWESTERN
DISTRICT: GALVESTON

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance.

PROJECT: Skiatook Lake, Oklahoma, (Continuing).

LOCATION: The project is located on Hominy Creek about 5 miles west of Skiatook in Osage County, Oklahoma.

DESCRIPTION: The study area consists of the reservoir area above Skiatook Dam up to the maximum pool caused by Probable Maximum Flood (PMF) inflow, the spillway channel, the Hominy Creek floodplain to its confluence with Bird Creek, and the Bird Creek floodplain to its confluence with the Verdigris River at Catoosa, Oklahoma. The most pertinent parts of the study area are the towns of Sperry and Turley; however, the affected area includes portions of Skiatook, Tulsa, and Owasso. Dam construction began in May 1977 and ended in July 1985. Reservoir impoundment began 31 October 1984. The project consists of a rolled earthfill embankment; a gate tower controlling flow through an outlet tunnel, an outlet works and outlet channel; and an uncontrolled limited service spillway excavated through the narrow right abutment ridge. The existing spillway will be lined with a structural concrete slab and sloped, tie back concrete walls, and a 100-foot-wide concrete lined chute will be constructed approximately 939 feet long to prevent headcutting erosion of the spillway. The relatively high uplift pressure resulting from seepage through the joints of the sandstone of the Chanute formation will be resisted by drainage and anchor bars drilled 10 feet into the foundation rock below the floor slab. Sections of concrete gravity walls will be required where the excavation is not deep enough for the sloped, tie back walls to be founded on firm material.

AUTHORIZATION: Flood Control Act of 1962.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA	FED COST	ACCUM PCT OF EST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
			Entire Project	30	September 2005
Original Project					
Actual Federal Cost	106,268,738				
Actual Non-Federal Cost	0				
Cash Contributions	0				
Other Costs	0				
Total Original Project Cost	106,268,738				
Remedial Work or Project Modification					
Estimated Federal Cost	10,000,000				
Estimated Non-Federal Cost	0				
Cash Contributions	0				
Other Costs	0				
Total Estimated Remedial or Modification Cost	10,000,000				
Total Estimated Project Cost	116,268,738				
Allocations to 30 September FY 2001	1,346,000				
Conference Allowance for FY 2002	1,800,000				
Allocation for FY 2002	1,512,000 1/				
Allocations through FY 2002	2,858,000	28			
Allocation Requested for FY 2003	3,000,000	59			
Programmed Balance to Complete	4,142,000				
Unprogrammed Balance to Complete after FY 2003	0				

1/ Reflects $288,000 reduction assigned as savings and slippage.

JUSTIFICATION: Recent hydrologic analysis revealed that the spillway would suffer extensive erosion and ultimately catastrophically breach if the PMF were to occur. Such a condition would cause major flooding, including the possibility of loss of human life in the downstream communities of Skiatook and Sperry. According to the approved Dam Safety Assurance Program Evaluation Report, the downstream effect of a PMF event with accompanying dam failure includes approximately $70,000,000 of economic loss and an adverse effect to approximately 10,600 residents.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Construction	$ 2,765,000
Planning, Engineering, and Design	40,000
Construction Management	195,000
Total	$ 3,000,000

NON-FEDERAL COST: Not applicable.

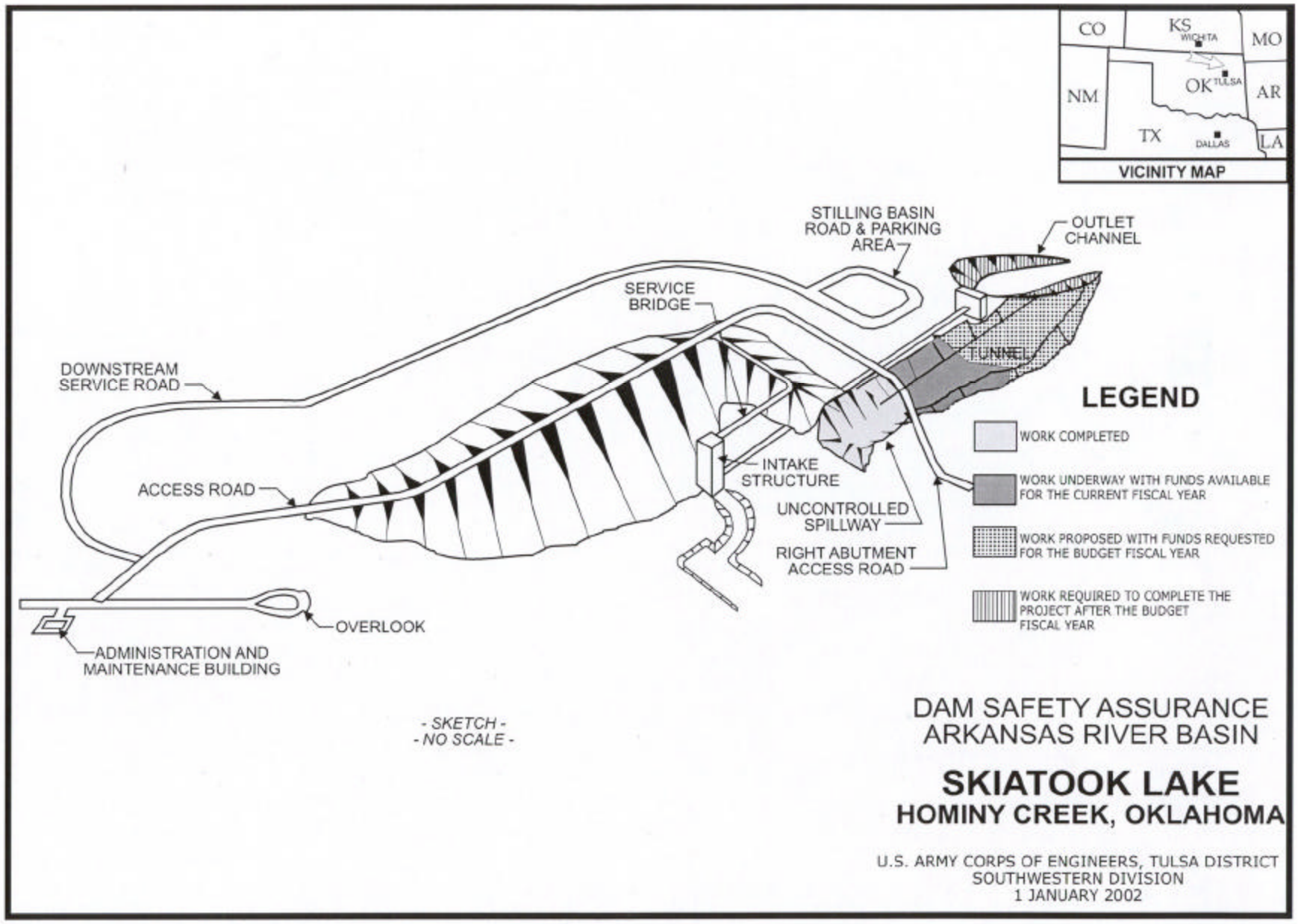
STATUS OF LOCAL COOPERATION: Not applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $10,000,000 is the same as last presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Not required.

The provisions of Section 404 of the Clean Water Act do not apply because the project improvements do not involve the placement of fill material or the discharge of dredge material in the waters of the United States.

OTHER INFORMATION: A Dam Safety Assurance Program Evaluation Report was approved in August 1997. The construction contracted was awarded in 29 June 2001.



Division: Southwestern **District: Tulsa** **Project: Skiatook Lake, Oklahoma (Dam Safety)**

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance

PROJECT: Table Rock Lake, Missouri and Arkansas, (Continuing)

LOCATION: Table Rock Dam is located on the White River 528.8 miles above its mouth, in Stone and Taney Counties in southwest Missouri near the city of Branson.

DESCRIPTION: Table Rock Dam has been shown to be hydrologically deficient, with storage available to contain 65 percent of the Probable Maximum Flood (PMF). Studies indicate that this flood would overtop the dam more than five feet and would breach the earthen embankment portion of the dam, causing catastrophic flood conditions for downstream areas including Branson. The project consists of the design and construction of an auxiliary gated spillway located just downstream of the existing left embankment, which will serve as a cofferdam during construction. The project includes the construction of a bridge to cross the spillway and a slight realignment of State Highway 165/265 on top of the existing dam. Coordination is ongoing with the Missouri Highway and Transportation Department.

AUTHORIZATION: Flood Control Acts of 1938, 1941 and 1944.

REMAINING BENEFITS-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not Applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA			**STATUS (1 Jan 2002)**	**PCT CMPL**	**PHYSICAL COMPLETION SCHEDULE**
Original Project			Entire Project	60	March 2008
Actual Federal Cost		$16,233,000			
Actual Non-Federal Cost		49,867,000			
Cash Contributions	0				
Hydropower Reimbursement	49,867,000				
Total Original Project Cost		66,100,000			

Division: Southwestern **District: Little Rock**

Project: Table Rock Lake Missouri and Arkansas (Dam Safety Assurance)

SUMMARIZED FINANCIAL DATA (CONTINUED)

			ACCUM PCT OF EST FED COST
Remedial Work or Project Modification			
Estimated Total Appropriation Requirement		$60,200,000	
Future Non-Federal Reimbursement		6,225,000	
Estimated Federal Cost (Ultimate)		53,975,000	
Estimated Non-Federal Cost		6,225,000	
Reimbursement		6,225,000	
Hydropower	$6,225,000		
Total Estimated Project Cost		$60,200,000	
Allocations to 30 September 2001		$35,010,000	
Conference Allowance for FY 2002		5,900,000	
Allocation for FY 2002		4,957,000 1/	
Allocations through FY 2002		39,967,000	66
Allocation Requested for FY 2003		10,000,000	83
Programmed Balance to Complete		10,233,000	
Unprogrammed Balance to Complete After FY 2003		0	

1/ Reflects $943,000 reduction assigned as savings and slippage.

PHYSICAL DATA: The dam, which was started in October 1952 and completed in November 1958, consists of a 1,602 foot concrete gravity section and two earth fill embankment structures with a length of 4,821 feet. Total length of the dam is 6,423 feet rising to a maximum height of 252 feet above the streambed. The structure has four 4 foot by 9 foot sluices. The gated emergency spillway consists of ten bays, each 45 feet wide, controlled by 37-foot high tainter gates. The dam contains four 50,000-kw power units, each supplied by an 18-foot diameter penstock. Storage is provided in the reservoir for water supply, flood control, and generation of hydroelectric power. The original plan of improvement was to raise the top of the existing dam by ten feet. The current plan under construction will provide an auxiliary gated spillway in place of part of the existing earthen embankment on the left side, looking downstream. This gated emergency spillway consists of eight bays, each 48 feet wide, controlled by 43-foot high tainter gates.

JUSTIFICATION: The Program Evaluation Report of December 1994 found that the existing spillway would not safely pass the probable maximum flood without overtopping the dam; therefore, structural modifications to increase the reservoir capacity are recommended. It has been determined that this flood would overtop the dam by more than five feet and that failure of the earthen portion of the dam would occur.

A Table Rock Dam failure would cause about $363 million of downstream damages. Damages would consist of $171 million to commercial and residential structures, $44.4 million to recreation facilities, $46 million to roads and bridges, $95 million to hydropower facilities at Table Rock and Bull Shoals projects and $6.3 million to the Shepherd of the Hills Fish Hatchery. In addition, Table Rock Lake Project is estimated to generate $106 million annually from project purposes of flood control, recreation, and hydropower. These benefits would be lost if the dam were to fail. A failure of the dam could put 12,400 people at risk to injury and death with major damages to the city of Branson, Missouri.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Construction on Auxiliary Gates Spillway	$ 9,166,000
Planning, Engineering and Design	41,000
Construction Management	793,000
Total	$10,000,000

NON-FEDERAL COST: The non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	**Payments During Construction and Reimbursements**	**Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs**
Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of hydropower facilities.	$6,225,000	$0
Total Non-Federal Costs	$6,225,000	$0

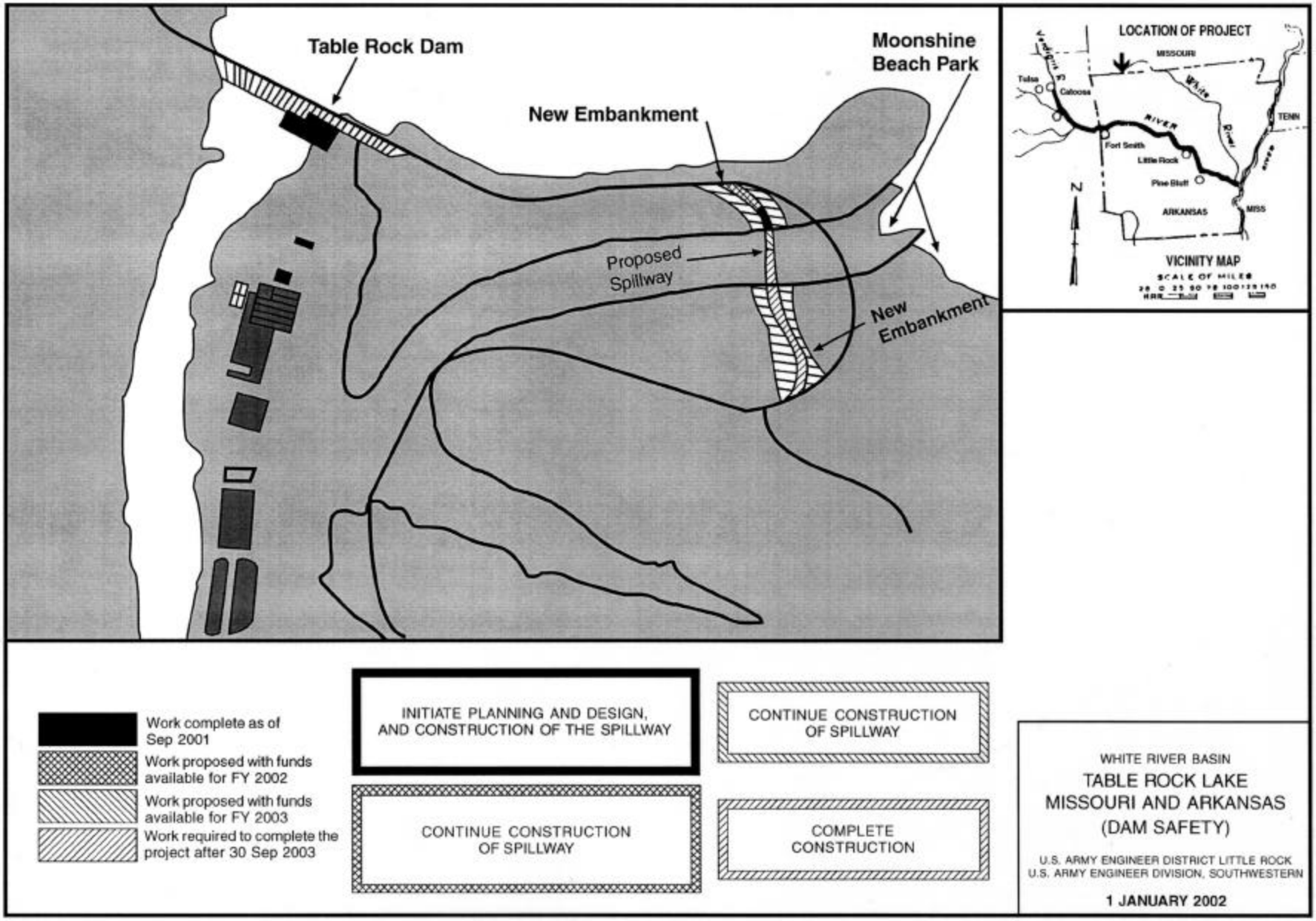
STATUS OF LOCAL COOPERATION: The Southwestern Power Administration has been contacted and understands the requirement for reimbursement of costs allocated to power.

Division: Southwestern **District: Little Rock** **Project: Table Rock Lake Missouri and Arkansas (Dam Safety Assurance)**

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $60,200,000 is the same as last submitted to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Finding of No Significant Impact was signed in October 1997.

OTHER INFORMATION: The initial Planning and Engineering was accomplished using Operation and Maintenance, General funds. The project completion date has been delayed from March 2007 presented last year (FY2002) to March 2008 due to constrained budget ceilings.



Division: Southwestern **District: Little Rock** **Project: Table Rock Lake Missouri and Arkansas (Dam Safety Assurance)**

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance

PROJECT: Tenkiller Ferry Lake, Oklahoma (Continuing)

LOCATION: The project is located on the Illinois River about 7 miles northeast of Gore and about 22 miles southeast of Muskogee, Oklahoma.

DESCRIPTION: The study area consists of the reservoir area above Tenkiller Ferry Dam up to the maximum pool caused by PMF inflow, the Illinois River floodplain from Tenkiller Ferry Dam to the Arkansas River, and the Arkansas River flood plain from Webbers Falls Lock and Dam to a point just below Fort Smith and Van Buren, Arkansas, including R. S. Kerr and W. D. Mayo reservoirs and navigation structures.

AUTHORIZATION: Flood Control Act of 1938.

BENEFIT-COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**	**STATUS (1 Jan 2002)**	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Original Project				Entire Project	45	September 2006
Actual Federal Cost		$ 24,057,718				
Actual Non-Federal Cost		0				
Cash Contributions	$ 0					
Other Costs	0					
Total Original Project Cost		$ 24,057,718				

SUMMARIZED FINANCIAL DATA (Continued):

			ACCUM PCT. OF EST. FED. COST
Project Modification			
Estimated Federal Cost		$ 38,400,000	
Estimated Non-Federal Cost		0	
Cash Contribution	$ 0		
Other Costs	0		
Total Estimated Modification Cost		$ 38,400,000	
Total Estimated Project Cost		$ 62,457,718	
Allocations to 30 September 2001		16,121,000	
Conference Allowance for FY 2002		3,700,000	
Allocation for FY 2002		3,109,000 1/	
Allocations through FY 2002		19,230,000	50
Allocation Requested for FY 2003		4,600,000	62
Programmed Balance to Complete		14,570,000	
Unprogrammed Balance to Complete after FY 2003		0	

1/ Reflects $591,000 reduction assigned as savings and slippage.

PHYSICAL DATA: Construction began in June 1947. Embankment closure was completed in May 1952. The dam consists of an earthfill embankment approximately 3,000 feet in length, an earthfill dike about 1,350 feet in length and with a gated concrete gravity spillway located on the right abutment. Ten tainter gates 50 feet wide by 24 feet high regulate lake releases through the spillway. The low flow control outlet is a 19-foot diameter conduit with two service gates. The top of dam is at elevation 677.2.

An auxiliary spillway with five 50 feet wide by 35 feet high tainter gates would be constructed near the right abutment of the embankment. This spillway structure has been designed similar to the existing spillway.

JUSTIFICATION: The spillway is inadequate to pass the probable maximum flood, and if it occurred, the embankment would be overtopped for a duration of 30 hours at a peak elevation of approximately 683.5 feet. The existing spillway would pass about 85 percent of the probable maximum flood with no freeboard. If the probable maximum flood occurred and overtopping caused dam failure, severe economic damage would be incurred downstream. According to the approved Dam Safety Assurance Program Recon Report, the downstream effect of a PMF event with accompanying dam failure, would include approximately $298,000,000 of economic loss and an adverse effect on approximately 9,000 residents.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Construction	$ 4,018,000
Planning, Engineering & Design	156,000
Construction Management	426,000
Total	$ 4,600,000

NON-FEDERAL COST: Not applicable.

STATUS OF LOCAL COOPERATION: Not applicable.

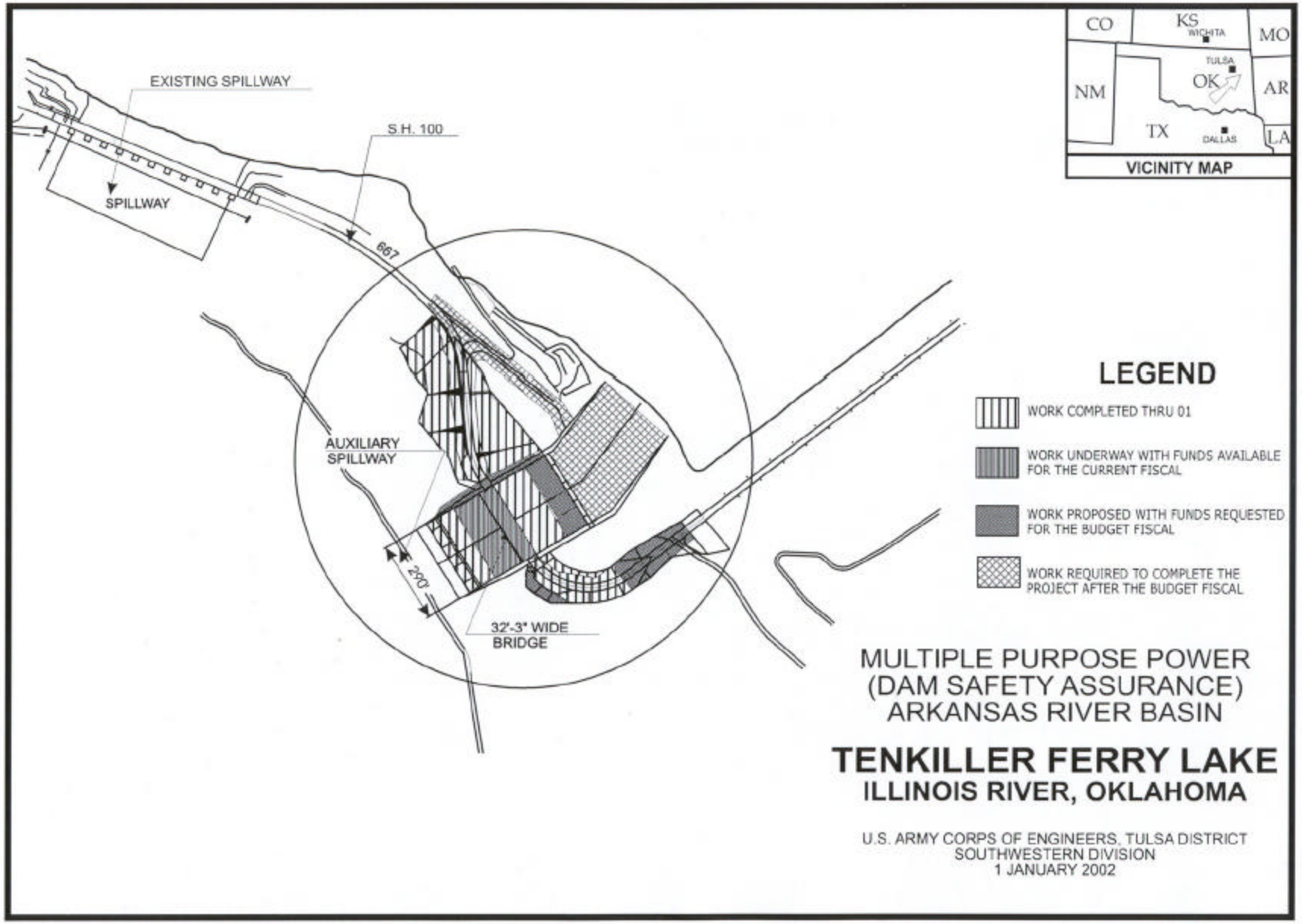
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $38,400,000 is an decrease of $900,000 from the latest estimate ($39,300,000) presented to Congress (FY 2002). This change includes the following items:

Item	**Amount**
Price Escalation on Construction Features	(+) $ 900,000
Total	(-) $ 900,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Not required.

The provisions of Section 404 of the Clean Water Act do not apply because the project improvements do not involve the placement of fill material or the discharge of dredge material in the waters of the United States.

OTHER INFORMATION: A feature design memorandum was completed in September 1995. Plans and specifications for Phase I were completed in December 1998. The Phase 1 contract was awarded in May 1999.



Division: Southwestern **District: Tulsa** **Project: Tenkiller Ferry Lake Oklahoma (Dam Safety)**

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

l. Navigation

a. Channels and Harbors

The budget estimate of $71,413,000 provides for essential operation and maintenance work on the 13 channel and harbor projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and spoil disposal areas, snagging, and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Texas			
Barbour Terminal Ship Channel	577,000 (0) (577,000)	606,000 (0) (606,000)	1. None. 2. Dredge navigation channel.
Bayport Ship Channel	2,275,000 (0) (2,275,000)	2,389,000 (0) (2,389,000)	1. None. 2. Dredge navigation channel.
Brazos Island Harbor	1,222,000 (0) (1,222,000)	2,143,000 (0) (2,143,000)	1. None. 2. Dredge navigation channel.
Corpus Christi Ship Channel	5,399,000 (0) (5,399,000)	5,669,000 (0) (5,669,000)	1. None. 2. Dredge navigation channel.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

l. Navigation (Continued)

a. Channels and Harbors (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Texas (Continued)			
Freeport Harbor	6,950,000 (0) (6,950,000)	7,298,000 (0) (7,298,000)	 1. None. 2. Dredge navigation channel.
Galveston Harbor and Channel	130,000 (0) (130,000)	4,887,000 (0) (4,887,000)	 1. None. 2. Dredge navigation channel.
GIWW - Channel to Victoria	585,000 (370,000) (215,000)	0 (0) (0)	 1. Archeology report completed in FY 2002. 2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

l. Navigation (Continued)

a. Channels and Harbors (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Texas (Continued)			
Gulf Intracoastal Waterway	19,994,000	20,829,000	
	(2,835,000)	(2,640,000)	1. None.
	(17,159,000)	(18,189,000)	2. Dredge various reaches of the navigation channel.
Houston Ship Channel	7,555,000	8,254,000	
	(0)	(0)	1. None.
	(7,555,000)	(8,254,000)	2. Dredge navigation channel.
Matagorda Ship Channel	1,665,000	1,748,000	
	(0)	(0)	1. None.
	(1,665,000)	(1,748,000)	2. Dredge navigation channel.
Mouth of Colorado River	2,480,000	2,604,000	
	(30,000)	(77,000)	1. Perform study on excessive shoaling in vicinity of Entrance Jetties in FY 2003.
	(2,450,000)	(2,527,000)	2. Dredge navigation channel.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

l. Navigation (Continued)

a. Channels and Harbors (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Texas (Continued)			
Sabine-Neches Waterway	14,272,000 (14,000) (14,258,000)	14,986,000 (0) (14,986,000)	 1. Completed installation of tide gauges in FY 2002. 2. Dredge navigation channel.
Trinity River and Tributaries	1,000,000 (0) (1,000,000)	0 (0) (0)	 1. None. 2. None.
Total Channels and Harbors	64,104,000 (3,249,000) (60,855,000)	71,413,000 (2,717,000) (68,696,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

1. Navigation (Continued)

b. Locks and Dams

The budget estimate of $27,848,000 provides for essential operation and repairs on one system containing 13 locks and dams. Included are: labor, supplies, materials and parts for day-to-day functioning; and periodic dredging, maintenance, repairs, or replacements of channels and structures. The requested amount also includes application of Special Recreation Use Fees (SRUF) for recreation areas.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Arkansas and Oklahoma			
McClellan-Kerr Arkansas River Navigation System	25,363,000 (15,620,000) (9,743,000)	27,848,000 (16,677,000) (11,171,000)	1. None. 2. Continue dredging of various reaches of the navigation channel. Rehabilitation and painting of various tainter gates. Perform lock unwatering at Lock 14.
Total - Locks and Dams	25,363,000 (15,620,000) (9,743,000)	27,848,000 (16,677,000) (11,171,000)	
TOTAL – NAVIGATION	89,467,000 (18,869,000) (70,598,000)	99,261,000 (19,394,000) (79,867,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control

a. Reservoirs

The budget estimate of $83,948,000 provides for the operation and ordinary maintenance of the 62 projects named in the list which follows, and the scheduling of reservoir flood control operations in the Southwestern Division. Included are: labor, supplies, materials and parts for day-to-day functioning. The requested amount also includes application of Special Recreation Use Fees (SRUF) for recreation areas.

State Project Name	**ESTIMATED OBLIGATIONS ($)** FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Arkansas			
Blue Mountain Lake	1,148,000	1,162,000	
	(908,000)	(919,000)	1. None.
	(240,000)	(243,000)	2. None.
DeQueen Lake	947,000	931,000	
	(723,000)	(731,000)	1. None.
	(224,000)	(200,000)	2. None.
Dierks Lake	946,000	959,000	
	(765,000)	(770,000)	1. None.
	(181,000)	(189,000)	2. None.
Gillham Lake	841,000	861,000	
	(689,000)	(697,000)	1. None.
	(152,000)	(164,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Arkansas (Continued)			
Millwood Lake	1,559,000	1,257,000	
	(981,000)	(985,000)	1. None.
	(578,000)	(272,000)	2. None.
Nimrod Lake	1,319,000	1,409,000	
	(1,077,000)	(1,154,000)	1. None.
	(242,000)	(255,000)	2. None.
Kansas			
Council Grove Lake	1,116,000	1,491,000	
	(763,000)	(773,000)	1. None.
	(353,000)	(718,000)	2. None.
El Dorado Lake	478,000	460,000	
	(379,000)	(357,000)	1. None.
	(99,000)	(103,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Kansas (Continued)			
Elk City Lake	526,000	552,000	
	(357,000)	(375,000)	1. None.
	(169,000)	(177,000)	2. None.
Fall River Lake	973,000	1,204,000	
	(749,000)	(853,000)	1. Clean relief wells and piezometers in FY 2003.
	(224,000)	(351,000)	2. None.
John Redmond Dam and Reservoir	1,100,000	1,144,000	
	(676,000)	(664,000)	1. None.
	(424,000)	(480,000)	2. None.
Marion Lake	1,422,000	1,621,000	
	(1,009,000)	(989,000)	1. None.
	(413,000)	(632,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Kansas (Continued)			
Pearson-Skubitz			
Big Hill Lake	898,000	1,052,000	
	(513,000)	(648,000)	1. Perform additional routine operational maintenance due to aging infrastructure.
	(385,000)	(404,000)	2. None.
Toronto Lake	456,000	424,000	
	(392,000)	(357,000)	1. None.
	(64,000)	(67,000)	2. None.
Missouri			
Clearwater Lake	2,184,000	1,860,000	
	(1,253,000)	(1,408,000)	1. Realignment of operations and maintenance funding to more realistically reflect work being accomplished.
	(931,000)	(452,000)	2. None.
Oklahoma			
Arcadia Lake	429,000	451,000	
	(380,000)	(399,000)	1. None.
	(49,000)	(52,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Oklahoma (Continued)			
Birch Lake	572,000	602,000	
	(365,000)	(385,000)	1. None
	(207,000)	(217,000)	2. None.
Candy Lake	18,000	19,000	
	(18,000)	(19,000)	1. None
	(0)	(0)	2. None.
Canton Lake	3,012,000	1,620,000	
	(973,000)	(948,000)	1. None.
	(2,039,000)	(672,000)	2. None.
Copan Lake	824,000	821,000	
	(522,000)	(504,000)	1. None.
	(302,000)	(317,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Oklahoma (Continued)			
Fort Supply Lake	879,000	924,000	
	(423,000)	(445,000)	1. None.
	(456,000)	(479,000)	2. None.
Great Salt Plains Lake	234,000	209,000	
	(164,000)	(136,000)	1. Performed periodic inspection in FY 2002.
	(70,000)	(73,000)	2. None.
Heyburn Lake	572,000	600,000	
	(397,000)	(417,000)	1. None.
	(175,000)	(183,000)	2. None.
Hugo Lake	1,670,000	1,732,000	
	(1,166,000)	(1,204,000)	1. None.
	(504,000)	(528,000)	2. None.
Hulah Lake	406,000	426,000	
	(292,000)	(306,000)	1. None.
	(114,000)	(120,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Oklahoma (Continued)			
Kaw Lake	1,840,000	1,931,000	
	(1,220,000)	(1,280,000)	1. None.
	(620,000)	(651,000)	2. None.
Oologah Lake	1,843,000	2,360,000	
	(970,000)	(1,433,000)	1. Clean relief wells and piezometers, and perform cultural resources investigation in FY 2003.
	(873,000)	(917,000)	2. None.
Optima Lake	56,000	59,000	
	(36,000)	(38,000)	1. None.
	(20,000)	(21,000)	2. None.
Pensacola Reservoir - Lake O' the Cherokees	32,000	34,000	
	(32,000)	(34,000)	1. None.
	(0)	(0)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Oklahoma (Continued)			
Pine Creek Lake	1,170,000	1,187,000	
	(780,000)	(778,000)	1. None.
	(390,000)	(409,000)	2. None.
Sardis Lake	913,000	912,000	
	(692,000)	(681,000)	1. None.
	(221,000)	(231,000)	2. None.
Skiatook Lake	893,000	1,488,000	
	(455,000)	(558,000)	1. Perform periodic inspections and clean relief wells in FY 2003.
	(438,000)	(930,000)	2. None.
Waurika Lake	1,426,000	1,498,000	
	(668,000)	(703,000)	1. None.
	(758,000)	(795,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Oklahoma (Continued)			
Wister Lake	602,000	580,000	
	(519,000)	(492,000)	1. None.
	(83,000)	(88,000)	2. None.
Texas			
Aquilla Lake	708,000	743,000	
	(562,000)	(594,000)	1. None.
	(146,000)	(149,000)	2. None.
Arkansas-Red River Basins Chloride Control (Area VIII)	1,267,000	1,373,000	
	(673,000)	(706,000)	1. None.
	(594,000)	(667,000)	2. None.
Bardwell Lake	1,499,000	1,574,000	
	(1,096,000)	(1,154,000)	1. None.
	(403,000)	(420,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Texas (Continued)			
Belton Lake	2,578,000	2,707,000	
	(2,017,000)	(2,127,000)	1. None.
	(561,000)	(580,000)	2. None.
Benbrook Lake	2,290,000	2,011,000	
	(1,448,000)	(1,525,000)	1. None.
	(842,000)	(486,000)	2. None.
Buffalo Bayou and Tributaries	2,977,000	3,126,000	
	(2,977,000)	(2,729,000)	1. None.
	(0)	(397,000)	2. None.
Canyon Lake	2,743,000	2,498,000	
	(1,679,000)	(1,764,000)	1. None.
	(1,064,000)	(734,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Texas (Continued)			
Estelline Springs			
Experimental Project	5,000	5,000	
	(0)	(0)	1. None.
	(5,000)	(5,000)	2. None.
Ferrell's Bridge Dam -			
Lake O' the Pines	2,554,000	2,682,000	
	(1,843,000)	(1,941,000)	1. None.
	(711,000)	(741,000)	2. None.
Granger Dam and Lake	1,535,000	1,612,000	
	(1,144,000)	(1,216,000)	1. None.
	(391,000)	(396,000)	2. None.
Grapevine Lake	2,478,000	2,602,000	
	(1,891,000)	(1,983,000)	1. None.
	(587,000)	(619,000)	2. None.
Hords Creek Lake	1,190,000	1,250,000	
	(792,000)	(835,000)	1. None.
	(398,000)	(415,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Texas (Continued)			
Jim Chapman Lake	1,189,000	1,248,000	
	(629,000)	(663,000)	1. None.
	(560,000)	(585,000)	2. None.
Joe Pool Lake	784,000	823,000	
	(664,000)	(702,000)	1. None.
	(120,000)	(121,000)	2. None.
Lake Kemp	143,000	150,000	
	(137,000)	(144,000)	1. None.
	(6,000)	(6,000)	2. None.
Lavon Lake	2,485,000	2,609,000	
	(1,973,000)	(2,077,000)	1. None.
	(512,000)	(532,000)	2. None.
Lewisville Dam	3,253,000	3,134,000	
	(2,305,000)	(2,427,000)	1. None.
	(948,000)	(707,000)	2. None.
Navarro Mills Lake	1,596,000	1,676,000	
	(1,152,000)	(1,216,000)	1. None.
	(444,000)	(460,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Texas (Continued)			
North San Gabriel Dam and Lake Georgetown	1,748,000	1,835,000	
	(1,244,000)	(1,310,000)	1. None.
	(504,000)	(525,000)	2. None.
O. C. Fisher Dam and Lake	893,000	872,000	
	(627,000)	(661,000)	1. None.
	(266,000)	(211,000)	2. None.
Pat Mayse Lake	976,000	1,116,000	
	(676,000)	(748,000)	1. Clean relief wells and install piezometer in FY 2003.
	(300,000)	(368,000)	2. None.
Proctor Lake	1,659,000	1,623,000	
	(1,257,000)	(1,323,000)	1. None.
	(402,000)	(300,000)	2. None.
Ray Roberts Lake	821,000	862,000	
	(778,000)	(817,000)	1. None.
	(43,000)	(45,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Texas (Continued)			
Somerville Lake	2,555,000	2,683,000	
	(1,837,000)	(1,932,000)	1. None.
	(718,000)	(751,000)	2. None.
Stillhouse Hollow Dam	1,719,000	1,805,000	
	(1,391,000)	(1,475,000)	1. None
	(328,000)	(330,000)	2. None.
Texas Water Allocation	1,500,000	300,000	
Allocation	(1,500,000)	(300,000)	1. Reduced continuing study requirement in FY 2003.
	(0)	(0)	2. None.
Waco Lake	2,412,000	2,270,000	
	(1,679,000)	(1,781,000)	1. None.
	(733,000)	(489,000)	2. None.
Wallisville Lake	1,320,000	999,000	
	(1,225,000)	(999,000)	1. FY 2003 funds restricted for shallow draft harbor activities.
	(95,000)	(0)	2. None.
Wright Patman Dam and Lake	2,611,000	2,742,000	
	(2,026,000)	(2,132,000)	1. None.
	(585,000)	(610,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

a. Reservoirs.

Scheduling Reservoir Operations. The budget estimate of $838,000 provides for preparation, review and updating of water control manuals, real-time data collection to monitor hydrologic conditions at 93 Corps reservoirs, locks and dams and multiple purpose projects; and for the issuance of gate regulation instructions as necessary at 14 additional non-Corps dam and reservoir projects at which the Corps is responsible for flood control or navigation.

State Project Name	**ESTIMATED OBLIGATIONS ($)** FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Scheduling Reservoir Operations (All operations accounts)			
Kansas	(185,000)	(194,000)	
Oklahoma	(370,000)	(389,000)	
Texas	(243,000)	(255,000)	
Total Operations	(798,000)	(838,000)	1. None.
Total Maintenance	(0)	(0)	2. None.
Total – Reservoirs	83,590,000 (59,266,000) (24,324,000)	83,608,000 (60,506,000) (23,102,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

b. Channel improvement, inspection, and miscellaneous maintenance.

Inspection of Completed Works. The budget estimate of $640,000 provides for inspections at flood control projects constructed by the Corps and operated and maintained by non-Federal interests. The inspections are conducted to determine the extent of compliance with legal standards and to advise local interests, as necessary, of corrective measures required to ensure that project structures and facilities will continue to safely provide flood protection benefits. These projects consist of features such as channels, levees, floodwalls, drainage structures and pumping plants.

State Project Name	**ESTIMATED OBLIGATIONS ($)** FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Inspection of Completed Works (All Operations Accounts)			
Arkansas	(107,000)	(112,000)	
Kansas	(45,000)	(48,000)	
Missouri	(3,000)	(3,000)	
Oklahoma	(91,000)	(95,000)	
Texas	(399,000)	(383,000)	
Total Operations	(645,000)	(640,000)	1. None.
Total Maintenance	(0)	(0)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

2. Flood Control (Continued)

b. Channel improvement, inspection, and miscellaneous maintenance.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Total Channel Improvements,Inspections, and Miscellaneous Maintenance	645,000 (645,000) (0)	640,000 (640,000) (0)	
TOTAL - FLOOD CONTROL	84,235,000 (59,911,000) (24,324,000)	84,248,000 (61,146,000) (23,102,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

3. Multiple Purpose Power Projects

The budget estimate of $83,383,000 provides for the operation and maintenance of 18 multiple purpose projects, including 4 navigation locks and dams, named in the list which follows. These projects have a current operational capacity of 1,726,200 kilowatts of hydroelectric power production. Annual requirements are for the operation and ordinary maintenance of project facilities, labor, supplies, materials, and parts required for the day-to-day functioning. The requested amount also includes application of Special Recreation Use Fees (SRUF) for recreation areas.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Arkansas			
Beaver Lake	4,343,000	5,064,000	
	(3,337,000)	(3,723,000)	1. Realignment of operations and maintenance funding to more realistically reflect work being accomplished.
	(1,006,000)	(1,341,000)	2. None.
Bull Shoals Lake	4,402,000	5,675,000	
	(3,619,000)	(4,241,000)	1. Realignment of operations and maintenance funding to more realistically reflect work being accomplished.
	(783,000)	(1,434,000)	2. None.
Dardanelle Lock and Dam	5,337,000	5,699,000	
	(3,648,000)	(3,781,000)	1. None.
	(1,689,000)	(1,918,000)	2. None.
Greers Ferry Lake	4,873,000	5,445,000	
	(4,171,000)	(4,573,000)	1. None.
	(702,000)	(872,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Arkansas (Continued)			
Norfork Lake	3,255,000	4,368,000	
	(2,558,000)	(3,063,000)	1. Realignment of operations and maintenance funding to more realistically reflect work being accomplished.
	(697,000)	(1,305,000)	2. None.
Ozark-Jeta Taylor Lock and Dam	3,912,000	4,152,000	
	(2,662,000)	(2,859,000)	1. None.
	(1,250,000)	(1,293,000)	2. None.
Missouri			
Table Rock Lake	6,826,000	6,261,000	
	(5,186,000)	(5,168,000)	1. None.
	(1,640,000)	(1,093,000)	2. None.
Oklahoma			
Broken Bow Lake	1,549,000	1,627,000	
	(712,000)	(748,000)	1. None.
	(837,000)	(879,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Oklahoma (Continued)			
Eufaula Lake	6,277,000	5,546,000	
	(3,119,000)	(3,425,000)	1. None.
	(3,158,000)	(2,121,000)	2. Replace oil circuit breakers. Continue rehabilitation and painting of tainter gates.
Fort Gibson Lake	4,144,000	4,352,000	
	(1,667,000)	(1,750,000)	1. None.
	(2,477,000)	(2,602,000)	2. None.
Keystone Lake	5,553,000	4,647,000	
	(2,339,000)	(2,732,000)	1. Clean relief wells and piezometers, and perform cultural resources investigation in FY 2003.
	(3,214,000)	(1,915,000)	2. Replace oil circuit breakers. Continue rehabilitation and painting of tainter gates.
Robert S. Kerr Lock and Dam and Reservoir	5,130,000	4,648,000	
	(3,026,000)	(3,136,000)	1. None.
	(2,104,000)	(1,512,000)	2. None.
Tenkiller Ferry Lake	3,228,000	3,690,000	
	(1,568,000)	(1,646,000)	1. None.
	(1,660,000)	(2,044,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Oklahoma (Continued)			
Webbers Falls Lock and Dam	3,557,000	4,178,000	
	(2,429,000)	(2,482,000)	1. None.
	(1,128,000)	(1,696,000)	2. None.
Texas			
Denison Dam - Lake Texoma	5,532,000	6,132,000	
	(3,129,000)	(3,609,000)	1. Perform periodic inspection and conduct monitoring activities for Least tern threatened species in FY 2003.
	(2,403,000)	(2,523,000)	2. None.
Sam Rayburn Dam and Reservoir	4,417,000	4,559,000	
	(2,643,000)	(2,725,000)	1. None.
	(1,774,000)	(1,834,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Texas (Continued)			
Town Bluff Dam, B. A. Steinhagen Lake and Robert Douglas Willis Hydropower Project	1,748,000	2,135,000	
	(1,181,000)	(1,245,000)	1. None.
	(567,000)	(890,000)	2. None.
Whitney Lake	4,227,000	5,205,000	
	(2,869,000)	(3,033,000)	1. None.
	(1,358,000)	(2,172,000)	2. None.
TOTAL - MULTIPLE PURPOSE POWER PROJECTS	78,310,000	83,383,000	
	(49,863,000)	(53,939,000)	
	(28,447,000)	(29,444,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2003

4. Protection of Navigation

Project Condition Surveys. The budget estimate of $50,000 provides for hydrographic surveys, inspections, and studies to determine the condition of navigation channels that do not have any other maintenance work included in the budget request and disseminate the information to users of the projects. For the projects that do not require maintenance, surveys are performed at many of them in order to determine the degree of sedimentation so that users can be advised of channel conditions and future maintenance can be scheduled.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2002 Total (Operations) (Maintenance)	 FY 2003 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY02 to FY03(10%+/-) 2. Major Maintenance Items Budgeted in FY03(Threshold $500,000)
Project Condition Surveys			
Texas	15,000	50,000	
	(15,000)	(50,000)	1. Increase in scope and number of projects to be surveyed in FY 2003.
	(0)	(0)	2. None.
TOTAL - PROTECTION OF NAVIGATION	15,000	50,000	
	(15,000)	(50,000)	
	(0)	(0)	
GRAND TOTAL - SOUTHWESTERN DIVISION	252,027,000	266,942,000	
	(128,658,000)	(134,529,000)	
	(123,369,000)	(132,413,000)	